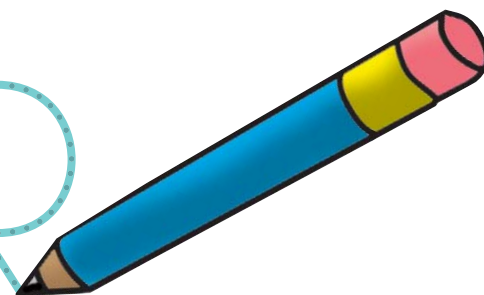
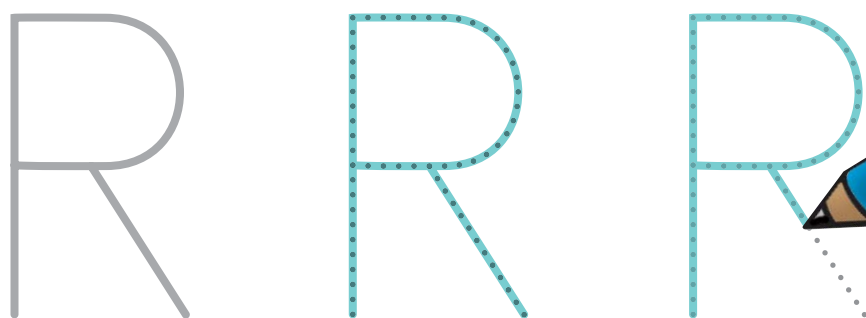
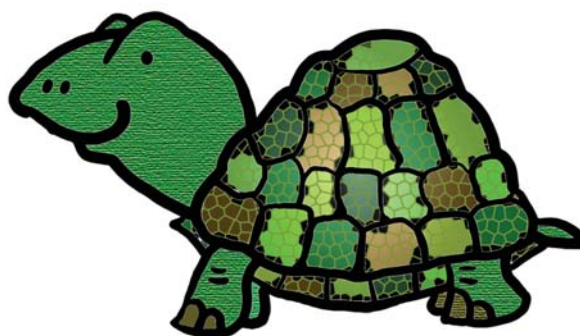


dr. Kristijan Musek Lešnik  
dr. Petra Lešnik Musek

# SLEDENJE ČRK: VELIKE TISKANE ČRKE 4 cm - brez črt

SLEDI PIKICAM  
IN RIŠI ČRKE.



# **SLEDENJE ČRK: VELIKE TISKANE ČRKE 4 cm - brez črt**

**dr. Kristijan Musek Lešnik**

**dr. Petra Lešnik Musek**

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*Včasih v navdušenju nad možnostmi, ki jih prinašajo nove tehnologije in orodja, prehitro opuščamo nekatere "zastarele" spretnosti. Tudi popuščanje pri učenju in utrjevanju pisanja in s pisanjem povezanih spretnosti, je velikokrat pospremljeno z ugotovitvijo, da bodo današnji otroci v prihodnosti veliko več tipkali na tipkovnice ali pritiskali znake na zaslonih različnih komunikacijskih naprav, kot pa pisali. Zaradi takšnih poenostavljenih predpostavk se v mnogih šolah in šolskih sistemih vse manj časa in pozornosti namenja urjenju in utrjevanju drobno motoričnih, grafomotoričnih, predpisalnih in pisalnih spretnosti.*

*Pri tem se pozablja nekaj pomembnega: pisanje z roko je veliko več kot le preprosta grafomotorična spretnost, ki jo lahko zlahka nadomestimo s sodobnimi tehnološkimi pripomočki, od tipkovnic do tabličnih računalnikov. Je pomembna spretnost, ki se je razvijala tisočletja, vzporedno s človekovim razvojem – kot njegova posledica a hkrati tudi kot pomemben dejavnik tega razvoja. Zato vaje za utrjevanje pisanja z roko ne prispevajo le k utrjevanju spretnosti, ki jih potrebujemo za pisanje, pač pa spodbujajo razvoj mnogoterih drobnogibalnih spretnosti, ki jih potrebujemo tudi pri številnih drugih dejavnostih, kjer pridejo do izraza drobni gibi in občutljiva koordinacija med očmi in rokami.*

*Vse več raziskav opozarja, da je pisanje z roko veliko več kot le ena od možnih oblik pisnega komuniciranja. Je tista oblika pisnega komuniciranja, ki je najbolj neposredno povezana s človekovim miselnim razvojem. Je tista oblika pisnega komuniciranja, ki jo sicer lahko nadomestimo z drugimi oblikami pisanja, ne moremo pa nadomestiti njenega širšega pomena.*

## KAZALO

POMEN URJENJA GRAFOMOTORIKE	5
GRAFOMOTORIČNE VAJE ZA OTROKE	9
SLEDENJE IN PRERISOVANJE VELIKIH TISKANIH ČRK	10
DELOVNI LISTI	11
VIRI	82

## POMEN URJENJA DROBNO GIBALNIH SPRETNOSTI IN GRAFOMOTORIKE

*Drobno gibalne in vidno prostorske spretnosti so pri predšolskih in šolskih otrocih povezane z različnimi kognitivnimi zmožnostmi (kratkoročni spomin, vizualno procesiranje, dolgoročni spomin in priklic, fluidno mišljenje, kristalizirana inteligentnost, ipd.), pa tudi z njihovimi poznejšimi dosežki ter ucnim uspehom, ali neuspehom.*

*“Eno je gotovo – pisani jezik otrok se razvija tako, da se pomika od risanja stvari k risanju besed. Vsa skrivnost poučevanja pisanega jezika je pripraviti in organizirati ta naravni prehod na ustrezen naain.*

Lev S. Vygotsky, esej “*The Prehistory of Writing*”, 1930 v knjigi *The Mind in Society*, 1978, po Sheridan, 2002

*»Čeprav se zdi ponavljajoče mehanično urjenje, ki spremlja vaje roanega pisanja, zastarelo, tovrstna telesna dejavnost pomaga učenecem uspeti. Te dejavnosti spodbujajo aktivnost moagan, vodijo k bolj tekoemu jeziku in pripomorejo v razvoju pomembnega znanja.«*

Frank Wilson, “*The Hand: How Its Use Shapes the Brain, Language and Human Culture*”, 1999)

### Kaj so drobnogibalne spretnosti?

Drobno gibalne (*finomotorične*) spretnosti so priučene spretnosti, ki vključujejo gibe manjših delov telesa (rok, zapestij, prstov, pa tudi drugih manjših sklopov mišic) v sodelovanju z vidom. Razvijajo se od zgodnjega otroštva naprej in otrokom omogoajajo vse bolj natanana dejanja (*na primer rokovanje z jedilnim priborom, natanan pincetni prijem, popravilo drobnih delov ure, ipd.*). Med ključne drobnogibalne spretnosti sodijo grafomotorične spretnosti.

### Zakaj so drobnogibalne spretnosti tako pomembne?

V zadnjih letih vse več raziskav opozarja, kako pomembno vlogo v otrokovem razvoju igra razvoj drobno gibalnih spretnosti. Drobno gibalne in vidno prostorske spretnosti so pri predšolskih in šolskih otrocih povezane s splošnimi in specifičnimi kognitivnimi zmožnostmi kot so kratkoročni spomin, vizualno procesiranje, dolgoročni spomin in priklic, fluidno mišljenje in kristalizirana inteligentnost (*Davis, Pitchford in Limback, 2011*), pa tudi s poznejšimi dosežki ter ucnim uspehom, ali neuspehom pri matematiki in pri drugih predmetih (*Beery in Beery, 2004; Cameron in sod., 2012; Carlson, Rowe in Curby, 2013; Curby in Carlson, 2014; Cirelli Coppede, in sod. 2012; Dineheart in Manfra, 2013; Grissmer in sod., 2010; Gunderson in sod., 2012; Lahav, Apter in Ratzon, 2013; Luo in sod., 2007; Morales in sod., 2011; Murrach, Chen in Cameron, 2013; Pagani in sod., 2010, 2011, 2012; Pereira, Araujo in Bracciali, 2011, Pontart in sod., 2013; Roebbers in sod., 2013; Sortor in Kulp, 2003; Stoeger, Suggate in Ziegler, 2013; Stoeger in Ziegler, 2010*). Mnogi ucnenci prav zaradi slabše razvitih drobno gibalnih spretnosti dosegajo slabše rezultate, kot bi jih pričakovali glede na njihove intelektualne zmožnosti (*Stoeger, Ziegler in Martzog, 2008; Stoeger, Suggate in Ziegler, 2013; Stoeger in Ziegler, 2013*).

Pomembno je vedeti, da lahko razvoj drobno gibalnih spretnosti pri predšolskih in šolskih otrocih sistematično spodbujamo in krepimo. Raziskave potrjujejo, da ustrežno strukturirani programi v predšolski in v šolski dobi vodijo k izboljšanju vidno prostorskih in drobno gibalnih spretnosti ter posledično k boljšim dosežkom (*Eisenstat, 2006; Fahimi in sod., 2013; Brown, 2010; Grissmer in sod., 2013, po Sparks, 2013; Hamm in Harper, 2014; St. John, 2013; Stewart, Rule in Giordano, 2007*).

### Kaj so grafomotorične spretnosti?

Grafomotorične spretnosti so kombinacija spoznavnih (*kognitivnih*), zaznavnih (*perceptivnih*) in drobnogibalnih (*finomotoričnih*) spretnosti, ki otroku omogoajajo, da na papir, ali na drugo podlago prenese podobe, ki si jih zamisli. Grafomotorične spretnosti zahtevajo dobro sodelovanje med vidno zaznavnimi in mišičnimi sistemi. Razvijajo se vzporedno z zorenjem različnih spoznavnih, zaznavnih in gibalnih spretnosti. Njihov postopni razvoj se dogaja ob spontanih izkušnjah, naj pa lahko vplivamo tudi s pomoajo usmerjene vadbe.

Razvijajoče se grafomotorične spretnosti otrokom omogoajajo napredovanje od prvih poskusov beleženja pomembnih idej ali podob iz okolja proti zapletenejšemu izražanju in trajnemu beleženju simbolov in misli. Ena od najbolj kompleksnih spoznavno-zaznavno-gibalnih spretnosti je pisanje. Zato ni naključje, da so raziskovalci v večini študij, ki so v zadnjih letih opozorile na pomen drobno gibalnih spretnosti za kognitivni razvoj in učne dosežke, raven drobno gibalnih spretnosti pri otrocih med drugim ugotavljali prav s pomoajo grafomotoričnih nalog (prim.: *Cameron in sod., 2012; Davis, Pitchford in Limback, 2011; Dineheart in Manfra, 2013; Grissmer in sod., 2010; Luo in sod., 2007; Piek, Hands in Licari, 2012; Pontart in sod., 2013; Stoeger, Suggate in Ziegler, 2013*).

## Zakaj grafomotorične vaje, če pisanje z roko izumira?

Razvoj in širjenje informacijske tehnologije ob koncu 20. in na začetku 21. stoletja globoko vpliva na izobraževalne procese v šolah. Ena od nenačrtovanih posledic tega razvoja je postopno spontano opuščanje "zastarelih" praks. Tudi popuščanje pri učenju in utrjevanju pisanja in s pisanjem povezanih spretnosti, je velikokrat pospremljeno z ugotovitvijo, da bodo današnji otroci v prihodnosti veliko več tipkali na tipkovnice ali pritiskali znake na zaslonih različnih komunikacijskih naprav, kot pa pisali.

Danes večina pisanih besedil ne nastaja več s pisanjem na papir, pač pa s pomočjo digitalnih pripomočkov, od računalnikov do pametnih telefonov in tabličnih računalnikov. Učenje pisanja, ki je bilo več stoletij en od temeljev izobraževanja otrok, se lahko zdi v času razcveta komunikacijske tehnologije, ko otroci pišejo s tipkovnicami, ali preko tabličnih računalnikov, zastarelo in nepotrebno. Vse več otrok zapušča osnovno šolo, ne da bi resnično osvojili in obvladali pisanje s pisanimi črkami. Vedno več srednješolcev in študentov pisne izdelke pripravlja z računalnikom, če že morajo pisati, pa pišejo z velikimi tiskanimi črkami. (Raziskava več kot 1.5 milijona esejev, ki so jih v letu 2005 pisali 16 in 17 letni ameriški dijaki, je na primer pokazala, da jih je le 15 odstotkov pisalo s pisanimi črkami; vir *CollegeBoard, 2006.*)

Popuščanje pri učenju in utrjevanju predpisalnih spretnosti in pisanja se zdi logična posledica ugotovitve, da današnjih otrok nima smisla obremenjevati z izumirajočo spretnostjo, ki jim v življenju ne bo pomembno koristila. Ta ugotovitev sloni na predpostavki, da se da pisanje z roko preprosto nadomestiti z drugimi oblikami pisnega izražanja, od tipkanja do uporabe pametnih tabličnih pripomočkov. Vendar ima ta predpostavka resno in globoko težavo: **JE NAPAČNA in NEVARNA!**



Zaradi takšnih poenostavljenih in napačnih predpostavk se v mnogih šolah in šolskih sistemih vse manj časa in pozornosti namenja urjenju in utrjevanju drobnogibalnih, grafomotoričnih, predpisalnih in pisalnih spretnosti. Otroci, katerih starši so v šolah popisali kilometre vrstic v zvezke, obkrožajo in podčrtujejo besedila v delovnih zvezkih, tipkajo besedila prek tipkovnic in pomikajo prste ter izbirajo znake na zaslonih tabličnih računalnikov in pametnih telefonov. Dobra plat tega je, da se učijo uporabljati komunikacijska orodja in tehnologijo. Slaba pa, da veliko manj urijo grafomotoriko in pisanje z roko.

## Zakaj učenje pisanja, če bodo današnji otroci v odraslih letih le malo pisali z roko?

Razvoj informacijske in komunikacijske tehnologije omogoča še pred leti neslutene obogatitve izobraževalnega procesa. Pisanje v zvezke, ponavljanje in urjenje črk in besed, je lahko za otroke naporno in nezanimivo. Računalniki, tablični računalniki in drugi sodobni pripomočki, ki so lahko veliko bolj interaktivni od peresa in papirja, omogočajo pripravo bolj zanimivih, pestrih in motivirajočih dejavnosti. Nujno je, da šole, učitelji, šolski programi in šolski sistemi sledijo temu napredku in pripravljajo otroke za vstop v svet, v katerega odraščajo. Po drugi strani pa je treba ob navdušenju nad sodobno informacijsko in komunikacijsko tehnologijo ter njenimi možnostmi, skrbeti, da v pretirani vnemi ne zavrzemo nekaterih tradicionalnih izobraževalnih metod, ki se morda na prvi pogled zdijo zastarele, vendar so lahko izrazito pomembne za otrokov razvoj. Zato navdušenje nad novimi možnostmi in orodji komunikacijske tehnologije ne sme biti opravičilo za to, da otroci vedno manj pišejo in da šole

zanemarjajo z ročnim pisanjem povezane zaznavno gibalne in grafomotorične spretnosti, ki se povezuje s ključnimi spoznavnimi procesi na drugačne načine, kot to velja za sodobne komunikacijske pripomočke.


Ko se otrok prosto giblje skozi različne faze procesa pisanja – od načrtovanja, sestavljanja, zapisovanja, pregledovanja, do posredovanja svojih zamisli, znanja, podatkov, občutkov in čustev – se dogaja veliko več kot le preprost proces prenašanja idej na papir. Pot od prvih čačk na papirju do dovršenih zgodb, pesmi, esejev in drugih besedil je dolga in naporna. Učenje in urjenje pisanja z roko je zahteven in dolgotrajen proces, ki vključuje izdaten miselni napor. Dokler zapisovanje črk s pomočjo vadbe ne postane avtomatizirano in se s tem ne razbremeni kognitivni napor pisanja, že sama motorična dejavnost zapisovanja zahteva toliko spomina, da so ovirani drugi kognitivni procesi višjega reda, na primer izražanje misli in sestavljanje besedila (*Deane in sod., 2008; Jones in Christensen, 1999; Medwell in Wray, 2007, 2008; Tucha, Tucha in Lange, 2008*). Ta pomik je izrazito očiten v šoli v prvih letih učenja pisanja: dokler mora otrok usmerjati pretežen del pozornosti v samo dejavnost pisanja, v oblikovanje črk in v zavesten nadzor drobnih gibov prstov in roke, lahko le manjši del pozornosti namenja vsebini učne ure. Pozneje postaja pisanje vedno bolj tekoče. Otroku ni treba več razmišljati o obliki (kako pisati), pač pa se lahko osredotoči na vsebino (o čem pisati). Šele takrat, ko je pisanje avtomatizirano in tekoče, se sprostito otrokove kapacitete za pozorno spremljanje pouka in za kognitivne procese višjega reda (pomnjenje, izražanje misli, sestavljanje besedila).




### **Pisanje z roko je več kot le grafomotorična spretnost, ki jo lahko zlahka nadomesti tipkanje!**

Pisanje z roko je več kot le preprosta grafomotorična spretnost. Zahteva namreč zaznavno gibalno integracijo (vizualno percepcijo, motorično koordinacijo ter vizualno motorično integracijo) in drobne gibalne spretnosti, brez katerih je nemogoče oblikovati črke na listu papirja. Zato je pisanje z roko kompleksna zaznavno-gibalna spretnost, pri kateri se zaznavni vidik nanaša na obliko črk, motorični pa na gibe, povezane njihovim nastajanjem na papirju (*Vinter in Chartrel, 2010*). Obvladovanje pisanja z roko zahteva nadzorovanje drobnih gibov rok in prstov in je posledica dolgotrajnega razvoja, h kateremu prispevajo tako dejavniki šolanja in učenja pisanja kot tudi otrokov siceršnji zaznavni, gibalni in spoznavni razvoj (*Chartrel in Vinter, 2008; Graham, 2006; Thomassen in Teulings, 1983*). Ustrežno utrjevanje pisanja z roko ima mnoge pozitivne posledice, od fluentnosti pisanja (hitrejše pisanje), kakovosti (boljše pisanje) in količine (več zapisanega) besedila, ki ga ustvarjajo otroci oziroma mladostniki, do boljšega spominskega priklica zapiskov kot pri tipkanju (*Graham in Santangelo, 2012; Lin in Bigenho, 2011*). Raziskave opozarjajo, da imajo lahko pomanjkljivosti v tem temeljnem učnem procesu in nazadovoljivo naučene spretnosti pisanja z roko daljnosežne posledice, med katerimi velja izpostaviti slabše šolske rezultate in težave pri kognitivnih procesih višjega reda, povezanih z ustvarjanjem besedila, pa tudi posledične težave na področju samospoštovanja (*Brossard Racine in sod., 2008; Deane in sod., 2008; Olive in sod., 2009; Ratzon, Efraim in Bart, 2007; Vinter in Chartrel, 2010*). Otroek in mladostnik, ki slabo piše, je med pisanjem lahko bolj obremenjen z razmišljanjem o črkah, kot osredotočen na besede in vsebino zapisanega besedila.

Uveljavljeni nevrolog F. R. Wilson poudarja, da je prav edinstvena struktura človeške roke in njena evolucija v sodelovanju z možgani omogočila človeški vrsti postati najbolj inteligentno bitje na Zemlji. V knjigi *“The Hand: How its Use Shapes the Brain, Language, And Human Culture”* (2001) opozarja, da je roka prav tako pomembna kot so pomembni naši možgani in da je neločljivo povezana z učenjem. Zato poudarja, da vsako izobraževanje, ki se osredotoča zgolj na um, vodi v osiromašenje in da bo v šolskih okoljih, kjer bo upadal poudarek na dejavnostih, ki vključujejo gibanje rok in telesa, prejkoslej tudi drugo znanje slabše obdelano in nezadostno naučeno. Spoznanje, da je roka organ, ki izdatno sodeluje pri spodbujanju umske dejavnosti in prevajanju misli v jezik, potrjujejo tudi sodobne raziskave, ki vključujejo slikanje možgan s funkcionalno magnetno resonanco (*Berninger, 2012*).



**Utrjevanje pisanja z roko ima mnoge pozitivne posledice, od fluentnosti (hitrejše pisanje), kakovosti (boljše pisanje) in količine (več zapisanega) besedila, ki ga ustvarjajo otroci oziroma mladostniki, do boljšega spominskega priklica kot pri tipkanju.**



**Roka je prav tako pomembna kot so pomembni naši možgani.**

### **Tipkanje lahko nadomesti pisanje, ne pa tudi procesov, s katerimi se povezuje pisanje z roko**

Če se zdi po eni strani logično, da razvijajoče se kognitivne zmožnosti omejujejo otrokovo zgodnje branje in pisanje, pa ne smemo pozabiti na drugo plat te krožne zanke: da tudi branje in pisanje vplivata na organiziranost in dinamiko otrokovega mišljenja (*Seifert, 2004*).

Raziskave opozarjajo, da že pri mlajših otrocih pisanje črk z roko sproža drugačne spoznavne procese in možgansko aktivnost kot zgolj sledenje črkam na papirju, ali njihovo tipkanje. Pisanje z roko prispeva tudi k boljšemu branju:

**Pisanje z roko prispeva k boljšemu branju.**



motorično znanje, ki se kopiči med učenjem pisanja, namreč prispeva k vizualni prepoznavi črk (*Longcamp in sod., 2008*). Pisanje z roko je pomembno za zgodnje spodbujanje obdelave črk v tistih predelih možgan, katerih aktivnost je podlaga za uspešno branje (*Harman James in Engelhart, 2012*). Tudi slikanje možgan s funkcionalno magnetno resonanco potrjuje, da se med branjem aktivira isti sistem znotraj možgan kot med pisanjem z roko, da se omrežja za branje v možganih razvijajo kot funkcija izkušenj z ročnim pisanjem in da pisanje z roko (v primerjavi s tipkanjem) pri predšolskih otrocih vodi k podobnemu nevronskega procesiranja znotraj vidnega sistema kot ga opažajo pri odraslih (*Harman James, 2012*). Tudi pri odraslih študije s pomočjo funkcionalne magnetne resonance izpostavljajo pomen motorične dejavnosti pri ročnem pisanju in potrjujejo, da pomnjenje specifičnih gibov, ki jih izvajamo med pisanjem, igra pomembno vlogo pri poznejši vizualni prepoznavi likov in črk (*Longcamp in sod., 2008*).

Pisanje z roko zahteva od pisca, da vsako črko neposredno oblikuje, medtem ko pri tipkanju te grafomotorične komponente ni (*Mangen in Velay, 2010*). Pri pisanju z roko je vizualna pozornost osredotočena na mesto, na katerem se pisalo (svinčnik, barvica) dotakne papirja, medtem ko pri tipkanju prst pritisne na tipkovnico, znak pa se pojavi na odmaknjenem zaslonu (*ibid.*).

Pri tipkanju besedil in pisanju z roko sodelujejo in se krepijo različne drobno gibalne spretnosti (*Sülzenbrück in sod., 2011*). Raziskave že več kot 20 let opozarjajo, da si otroci bolje zapomnijo in pozneje črkujejo besede, če jih pišejo z roko kot če jih tipkajo na računalniško tipkovnico (*Cunningham in Stanovich, 1990*). Sodobne študije, v katerih raziskovalci z uporabo slikovne diagnostike (FMRI) dobivajo vpogled v delovanje možgan, pojasnjujejo vzroke za tovrstne pojave in opozarjajo, da so pri pisanju z roko dejavna druga področja v možganih kot pri tipkanju.

**Otroci si bolje zapomnijo besede, če jih pišejo z roko, kot če jih pišejo na računalniško tipkovnico.**



V primerjavi s pisanjem z roko tipkanje vključuje preprostejšo kognitivno predelavo grafemov in preprostejša zaporedja motoričnih dejavnosti (*Deane in sod., 2008*). Stik pisala s papirjem, smer gibanja pisala, njegov pritisk na podlago in posledice – sled pisanja – naši možgani vse te podatke sprejemajo in obdelujejo drugače kot tipkanje besedila. Zaradi razlik v motoričnem učenju in različnega procesa razvijanja enih in drugih kompetenc je pomembno, da se otroci prej učijo pisati z roko, kot tipkati na tipkovnico (*Stevenson in Just, 2014*).

Raziskave kažejo tudi, da večina otrok hitreje piše na roko, kot prek tipkovnice (*Berninger in sod., 2009; Connelly, Gee in Walsh, 2007*). Še bolj pomenljive so razlike v zgradbi zapisanega besedila: besedila, ki jih učenci tipkajo na tipkovnico, z razvojnega vidika v povprečju za 2 leti zaostajajo za besedila, ki jih pišejo z roko (*Connelly, Gee in Walsh, 2007*) in vsebujejo manj dovršene povedi (*Berninger in sod., 2009*). Pisni izdelki učencev, ki niso deležni posebnega urjenja tipkanja na tipkovnico, so skromnejši kot na roko napisani izdelki njihovih vrstnikov, kar je potrdila tudi raziskava, ki je v različnih razredih potrdila pomembno razliko med učenci, ki so pisali z roko in vrstniki, ki so uporabljali tipkovnico: učenci, ki so pisali z roko, so v vseh starostnih skupinah, od drugega do šestega razreda, v svojih besedilih razvijali več idej od vrstnikov, ki so pisali s tipkovnico (*Hayes in Berninger, 2010*).

## **Tipkanje – DA! Tablični računalniki – DA! Vendar ne na račun opuščanja pisanja!**

Ali podatki o možganskih procesih, povezanih za razvojem drobno gibalnih spretnosti, grafomotoričnih spretnosti in pisanja opozarjajo, da je treba računalnike, tipkovnico, tablične računalnike in druge komunikacijske pripomočke umakniti iz učilnic? Nikakor ne! Otrok in mladostnikov ne moremo in ne smemo prikrajšati za izkušnje z orodji, tehnologijo, mediji in komunikacijskimi kanali, ki jih bodo morali obvladovati. Ključni nauk najnovejših nevropsiholoških raziskav na področju pisanja in branja ter drugih miselnih procesov je opozorilo, da zaradi možnosti, ki jih ponujajo nove tehnologije, ne bi smeli kar tako zanemariti razvoja drobno motoričnih spretnosti, grafomotorike in pisanja z roko. Slednje je namreč veliko več kot le ena od možnih oblik ustvarjanja in prenašanja informacij: je tista oblika shranjevanja in sporočanja misli, ki ne prispeva le k razvoju spretnosti izražanja in pismenosti, pač pa se povezuje tudi z drugimi miselnimi procesi. Če je v zadnjih letih prišlo do

**Večina otrok hitreje piše na roko kot preko tipkovnice. Njihova besedila so bolj dovršena, v njih razvijajo več idej.**



postopnega upada pozornosti, ki jo šole in šolski sistemi namenjajo tem spretnostim, nam različne raziskave in ugotovitve učiteljev, ki poročajo o upadanju grafomotoričnih spretnosti, pismenosti in zmožnosti izražanja otrok in mladostnikov, sporočajo, da je zadnji čas, da se ta trend obrne nazaj in da je smiselno okrepiti spodbujanje grafomotorike ter učenje, utrjevanje in spodbujanje pisanja z roko. Ne zato, ker se s tem ohranja tradicija. Pač pa zato, ker je to ključnega pomena za razvoj mnogih sposobnosti pri otrocih, ki segajo daleč onkraj samega pisanja.

# GRAFOMOTORIČNE VAJE ZA OTROKE

## Kaj so grafomotorične vaje?

Grafomotorične vaje so različne dejavnosti tipa pisalo-papir, ki so namenjene spodbujanju drobnogibalnih spretnosti roke, izboljšanju koordinacije oko – roka, spodbujanju pozornosti in natančnosti. Tovrstne vaje ne prispevajo le k utrjevanju spretnosti, ki jih potrebujemo za pisanje, pač pa spodbujajo razvoj drobnogibalnih spretnosti, ki jih potrebujemo tudi pri številnih drugih dejavnostih, kjer pridejo do izraza drobni gibi in občutljiva koordinacija med očmi in rokami.

Raziskave (*Golos in sod., 2011; Kambas in sod., 2010; Keller, 2001; Ratzon, Efraim in Bart, 2007; Vinter in Chartrel, 2010*) opozarjajo, da dejavnosti, ki spodbujajo senzorno integracijo in prispevajo k spodbujanju vizualno-motoričnega nadzora, vodijo k utrjevanju grafomotoričnih spretnosti in pisanja ter pozitivno vplivajo na učenje pisanja. To še posebno velja za vizualno motorične vaje oziroma urjenje (*Kambas in sod., 2010; Sudsawad in sod, 2002; Vinter in Chartrel, 2010*). Vaje v okviru programa ABC.ED so namenjene takšnemu vizualno-motoričnemu urjenju in utrjevanju predpisalnih in pisalnih spretnosti učencev. Načrtovane so tako, da spodbujajo različne vidike razvoja grafomotorike in različne spretnosti, ki postopoma prispevajo k razvoju drobno gibalnih spretnosti, grafomotorike in pisanja.

Dejavnosti, ki spodbujajo senzorno integracijo in prispevajo k spodbujanju in vizualno-motoričnega nadzora, vodijo k utrjevanju grafomotoričnih spretnosti in pisanja ter dolgoročno pozitivno vplivajo na učenje pisanja.

in



## Grafomotorične vaje in razvoj vizualno motorične integracije

Vizualno motorična integracija je koordinacija vidnih zaznav z gibi telesa, še posebno z gibi roke in prstov (Beery in Beery, 2004). Najbolj intenzivno se razvija v otroških letih, ko se morajo otroci naučiti koordinirati gibe telesa z okoljem in s predmeti okrog njih. Čeprav je vizualno motorična integracija ena od temeljnih zmožnosti za uspešno ukvarjanje tako s telesnimi aktivnostmi in športom kot tudi za umetniško izražanje (od slikanja do kiparjenja in drugih vrst oblikovanja različnih snovi), jo velikokrat najbolj povezujemo prav s pisanjem. Vendar se njen domet tu nikakor ne zaključuje: tako kot je pomembna za pisanje z roko, je vizualno motorična integracija nujen pogoj za široko paleto raznovrstnih človeških opravil, tudi za uspešno rokovanje s sodobnimi komunikacijskimi orodji, od računalnika do tabličnih računalnikov in pametnih telefonov. Sodobne raziskave opozarjajo tudi, da se učinkovita vizualno motorična integracija povezuje še z mnogimi drugimi pomembnimi dejavniki uspešnega življenja; pri otrocih se na primer povezuje z večjo uspešnostjo pri branju, računanju, matematiki in drugih dejavnostih (*Beery in Beery, 2004; Lahav, Apter in Ratzon, 2013; Pereira, Araujo in Bracciali, 2011, Sortor in Kulp, 2003*).

## Grafomotorične vaje niso namenjene le otrokom s težavami pri pisanju

V preteklosti so bili programi grafomotoričnih vaj namenjeni predvsem otrokom, ki so imeli težave pri učenju pisanja. Vaje, kakršne so na primer zajete v programu Write from the start (*Teodorescu in Addy, 1996*), so bile namenjene podpori otrokom s težavami na področju grafomotorike. Podobne grafomotorične vaje je v slovenskem prostoru pred 40 leti pripravil Borut Šali.

Vaje v okviru programa ABC.ED so namenjene vsem otrokom. Načrtovane so tako, da spodbujajo različne vidike razvoja senzomotorike, grafomotorike in drugih spretnosti, ki prispevajo k razvoju predbralnih in predpisalnih spretnosti ter k razvoju pisanja in drugih drobno gibalnih spretnosti. V vsakem delovnem zvezku je večje število različnih vaj, ki jih lahko izbiramo glede na trenutne spretnosti in izkušnje različnih otrok za optimalen učinek.

Vaje v okviru programa ABC.ED spodbujajo različne vidike razvoja senzomotorike in grafomotorike in različne spretnosti, ki prispevajo k razvoju pisanja in drugih drobno-gibalnih spretnosti.



# SLEDENJE IN PRERISOVANJE VELIKIH TISKANIH ČRK

## O sledenju in prerisovanju velikih tiskanih črk

Sledenje je pomembna aktivnost pri spodbujanju koordinacije oko - roka. Ko otrok s svinčnikom ali drugim pisalom sledi narisani črki in sproti primerja svojo črko z osnovno predlogo, se krepi nadzor nad drobnimi gibi roke s katerimi nadzira premikanje pisala in se utrjuje vizualno motorična integracija.

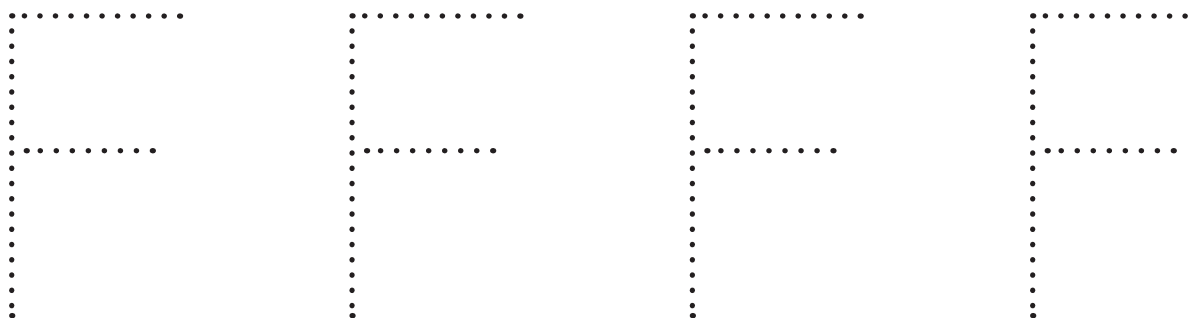
Podobno velja tudi za prerisovanje: med prerisovanjem otrok s pogledom sproti sledi napredujoči risbi in jo primerja z osnovno predlogo. Tudi pri teh vajah se utrjuje nadzor nad drobnimi gibi roke in krepi vizualno motorična integracija.

## Delovni listi in dejavnosti v tem delovnem zvezku

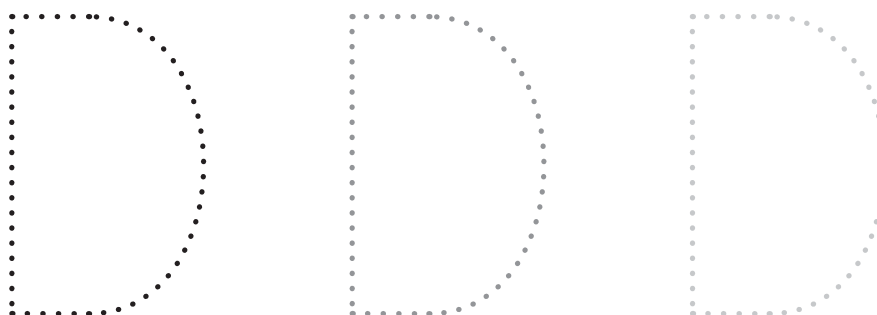
Naloge v tem delovnem zvezku so načrtovane tako, da otrok s sledenjem ali prerisovanjem 4 cm velikih tiskanih črk uri motorične dejavnosti, povezane s pisanjem, obenem pa se zaporedje gibov pri pisanju različnih črk utrjuje v motorični spomin.

Naloge v delovnem zvezku se razlikujejo in zahtevajo bodisi sledenje narisanim črkam, bodisi prerisovanje črk v prazne vrstice.

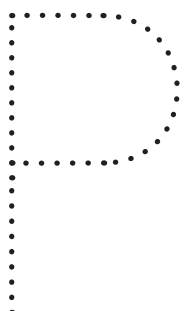
Primer: sledenje črkam



Primer: sledenje pojemajočim črkam, prerisovanje

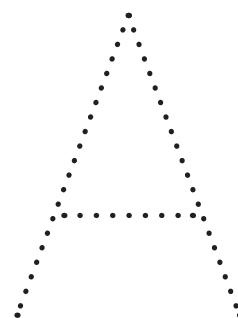
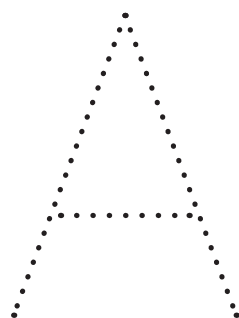
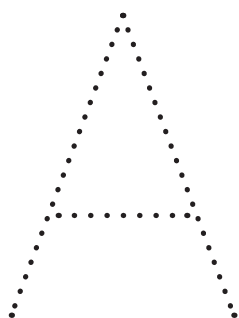
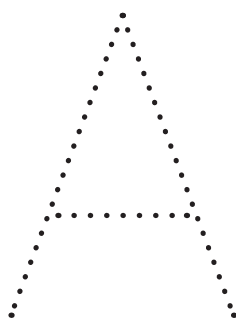
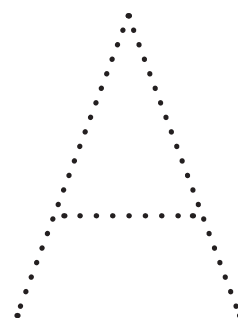
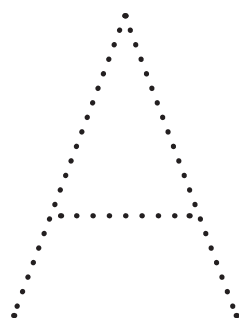
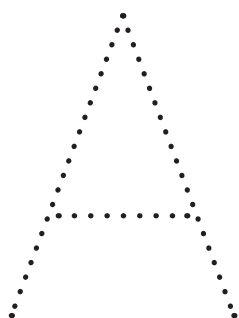
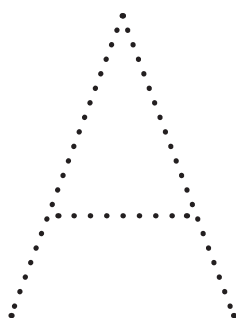
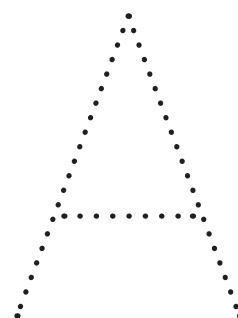
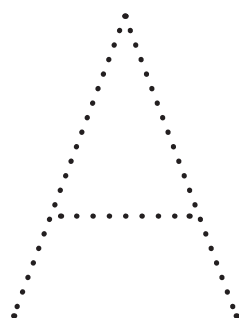
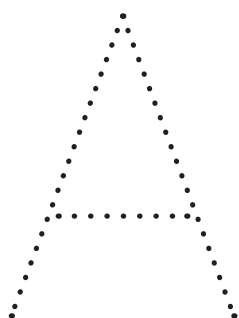
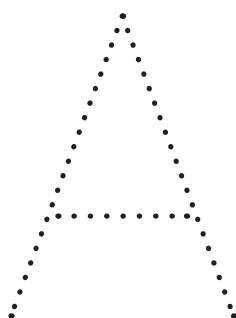
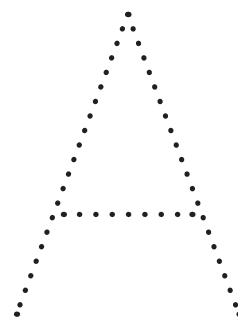
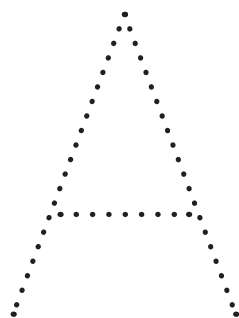
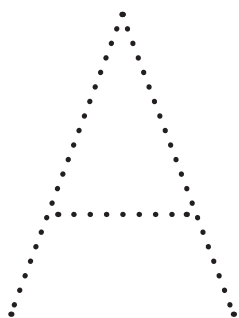
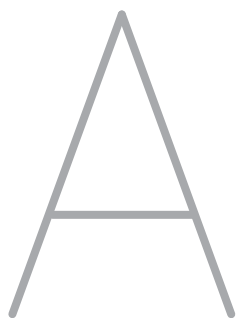


Primer: prerisovanje

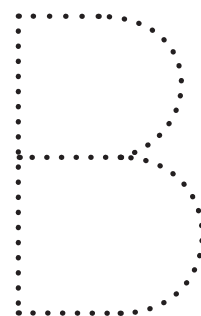
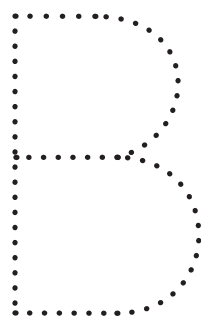
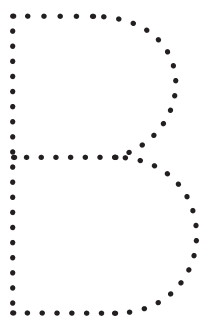
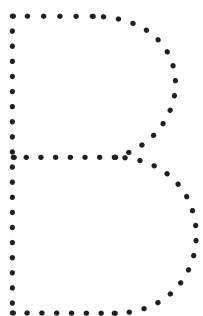
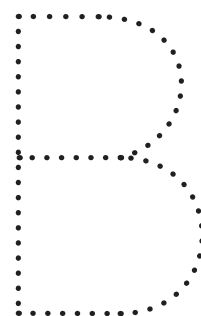
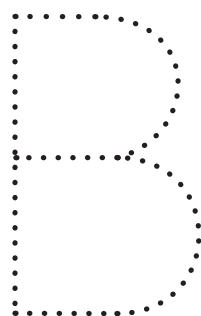
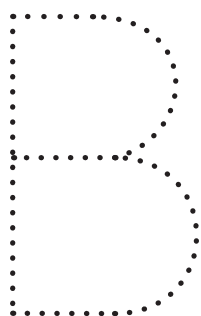
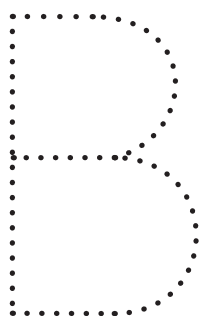
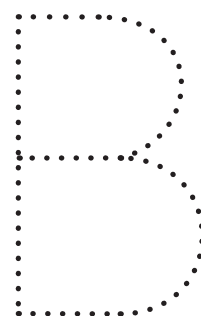
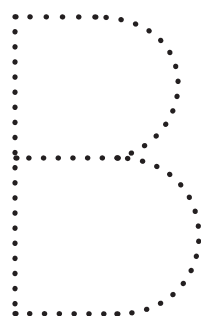
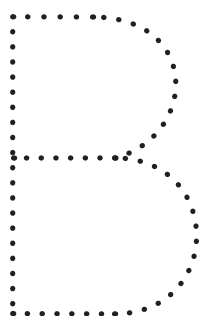
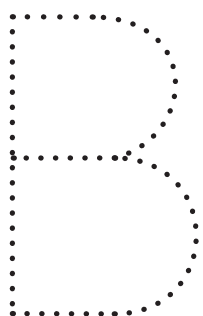
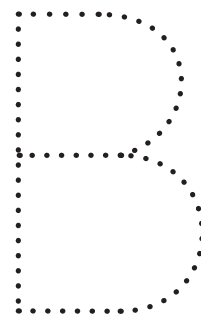
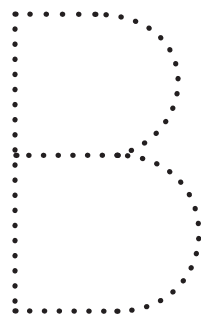
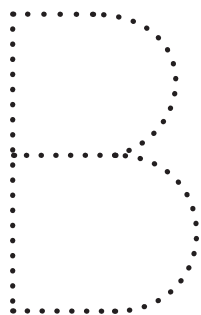
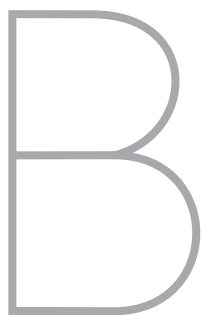


## DELOVNI LISTI

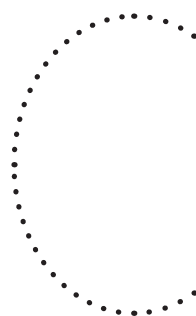
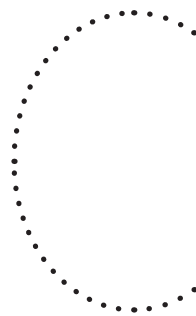
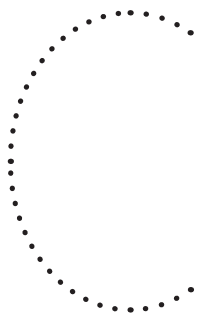
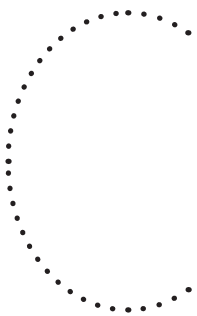
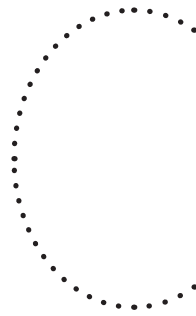
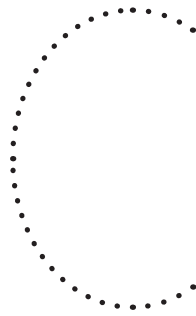
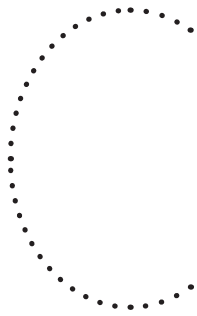
Sledi pikicam in riši črke A.



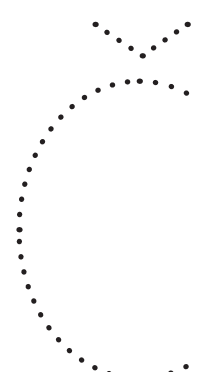
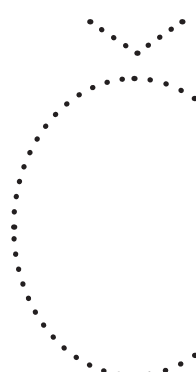
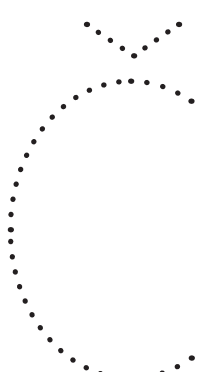
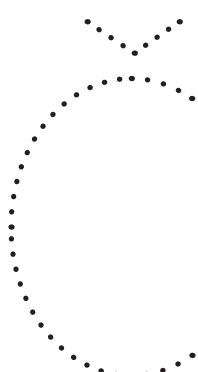
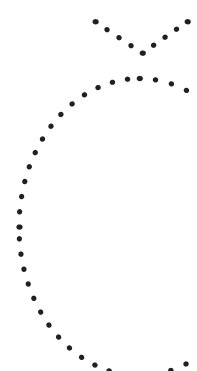
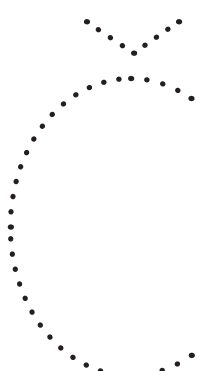
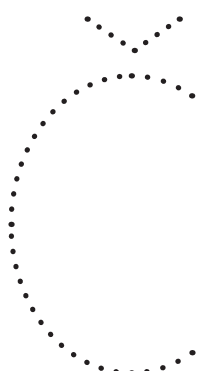
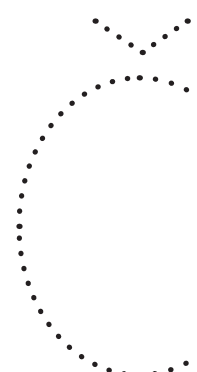
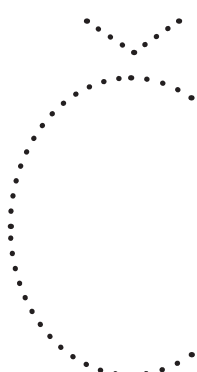
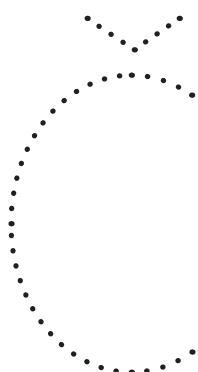
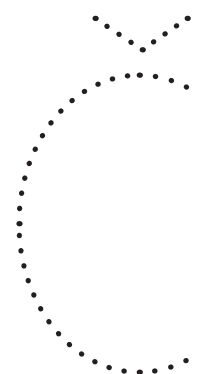
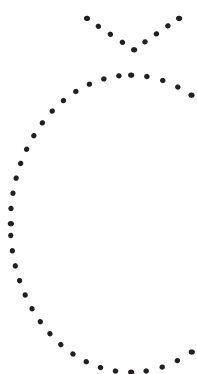
Sledi pikicam in riši črke B.



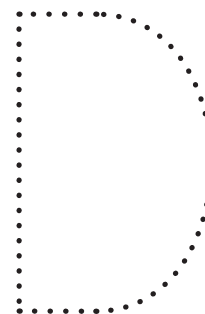
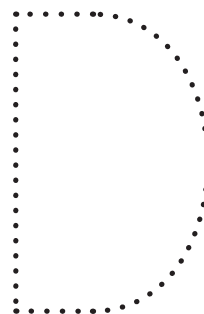
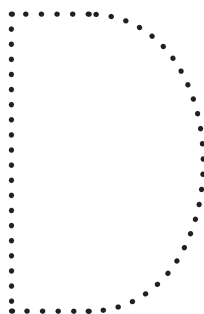
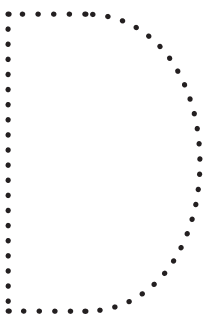
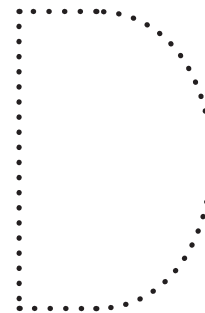
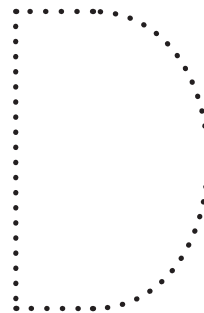
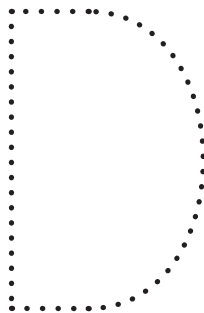
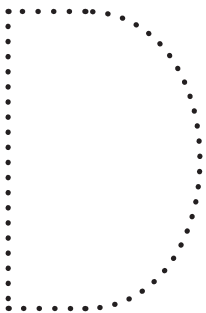
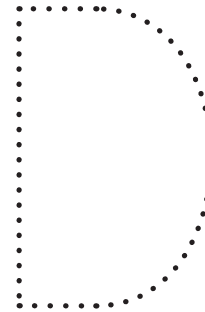
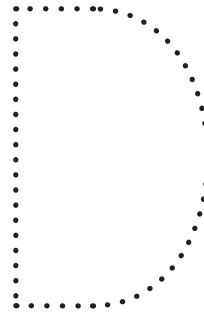
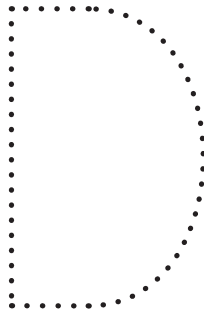
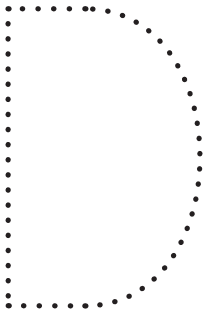
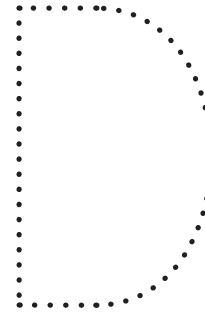
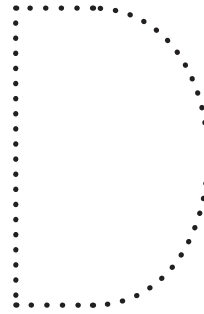
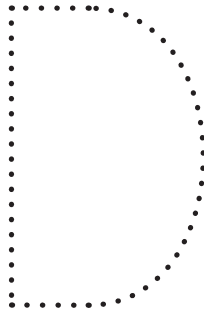
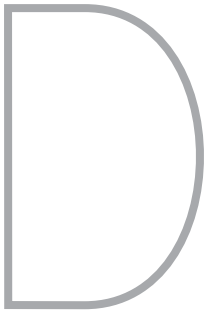
Sledi pikicam in riši črke C.



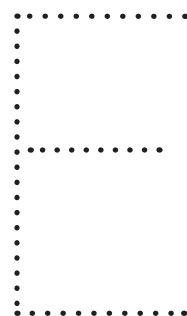
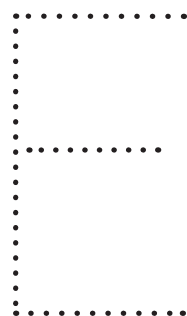
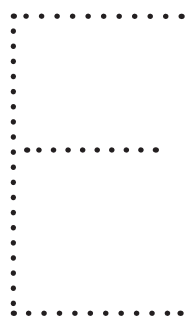
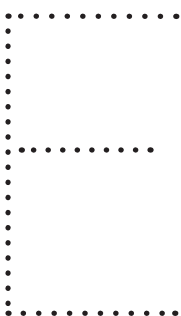
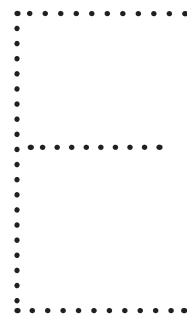
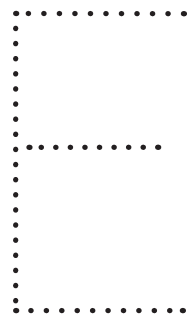
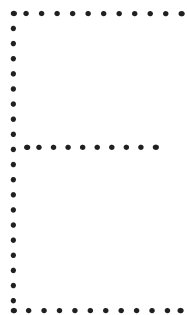
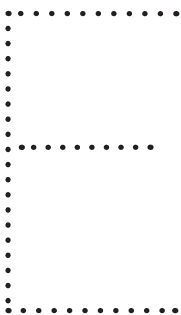
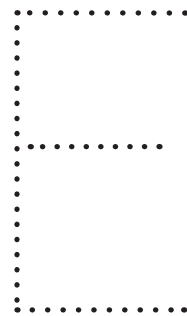
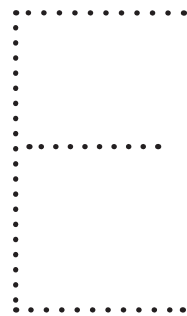
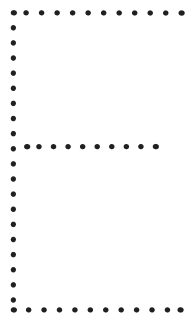
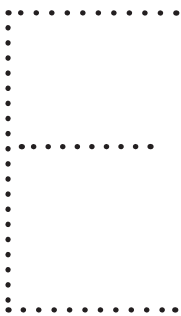
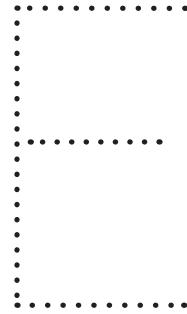
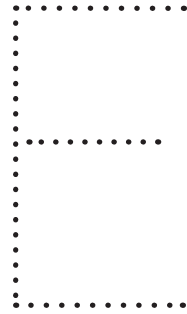
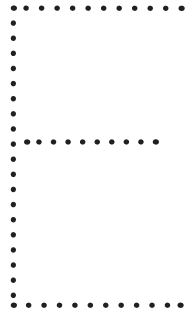
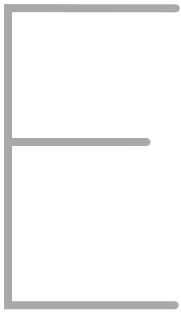
Sledi pikicam in riši črke Č.



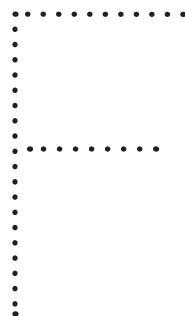
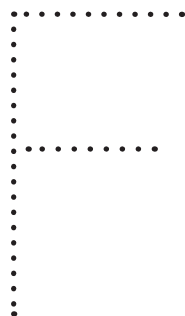
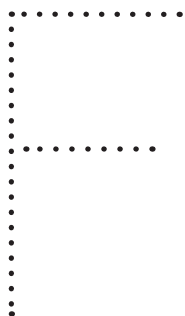
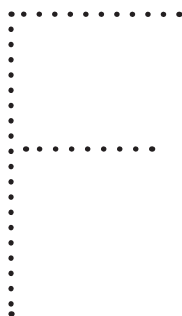
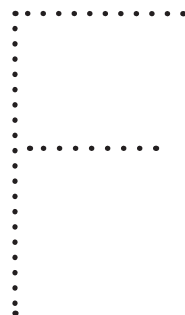
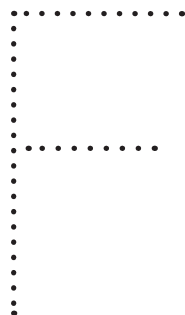
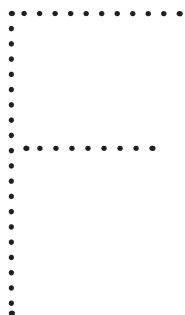
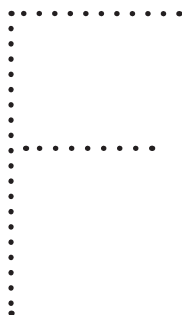
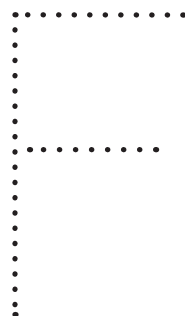
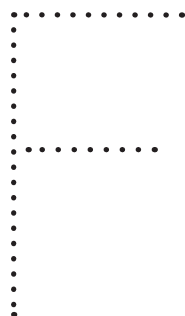
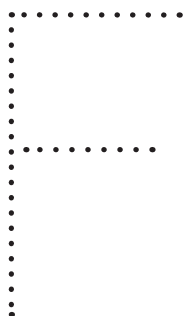
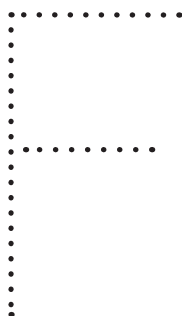
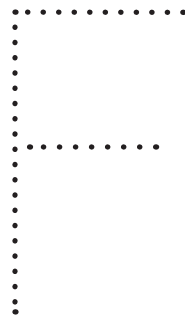
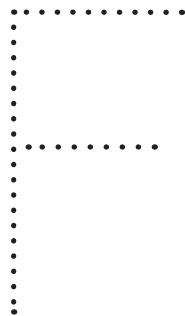
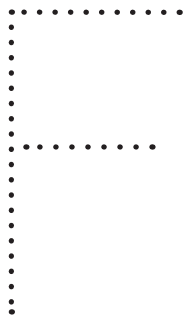
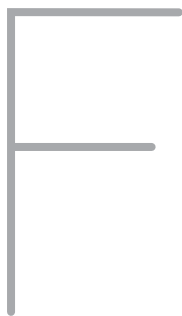
Sledi pikicam in riši črke D.



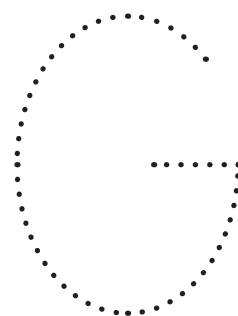
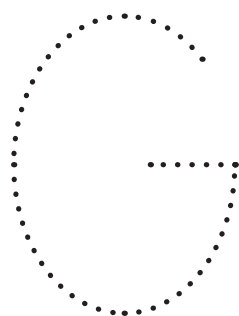
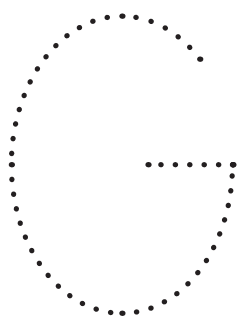
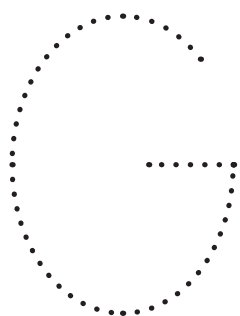
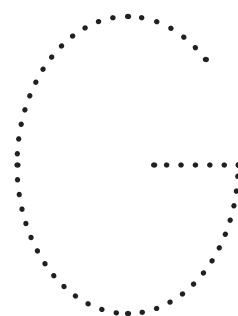
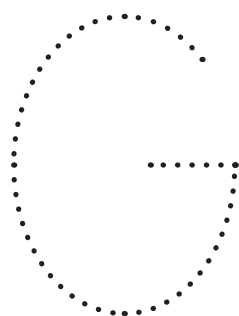
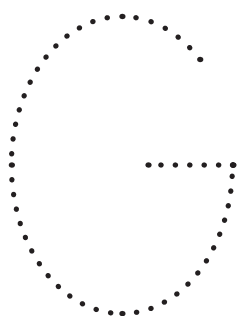
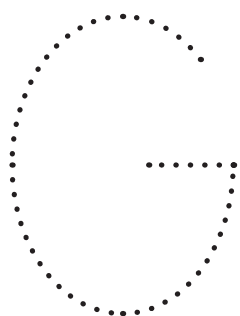
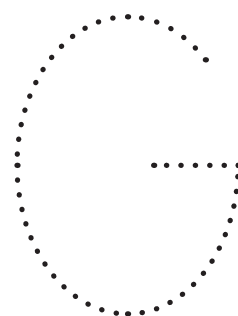
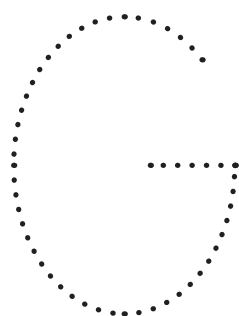
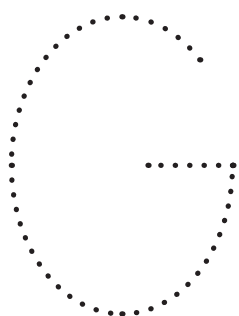
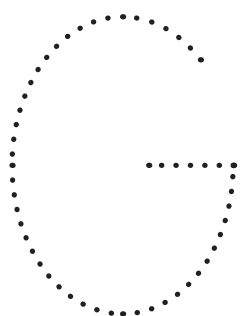
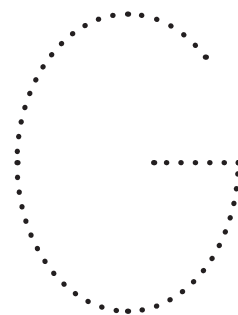
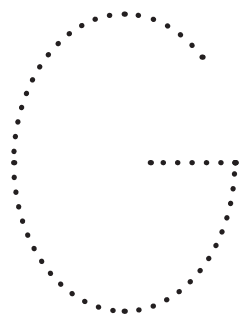
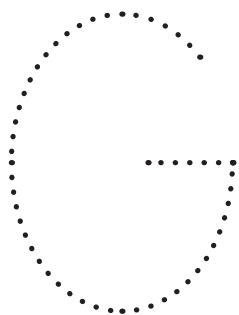
Sledi pikicam in riši črke E.



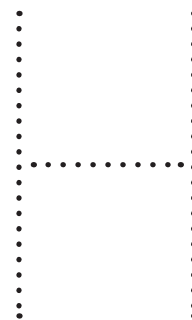
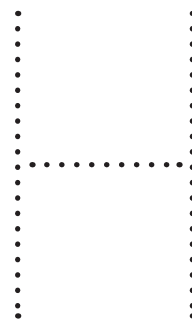
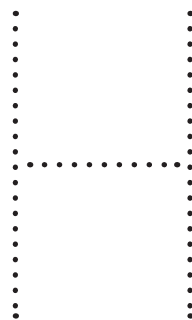
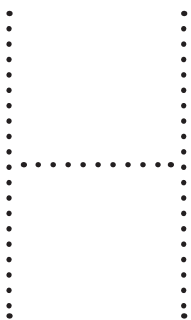
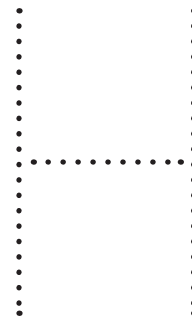
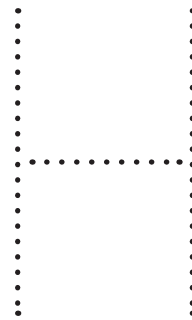
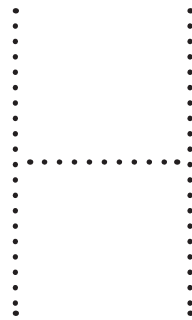
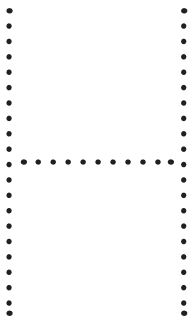
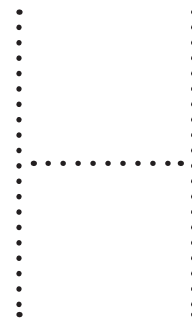
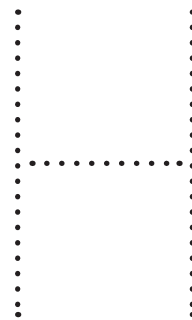
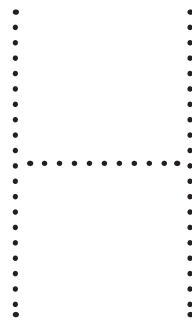
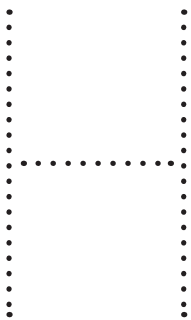
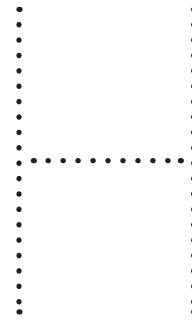
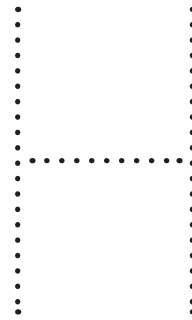
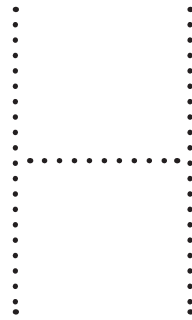
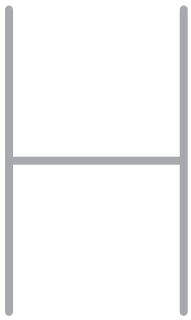
Sledi pikicam in riši črke F.



Sledi pikicam in riši črke G.



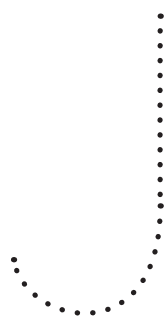
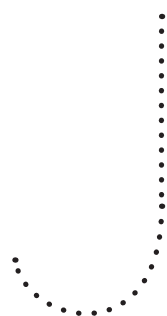
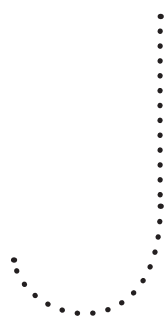
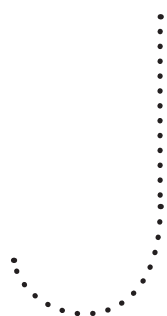
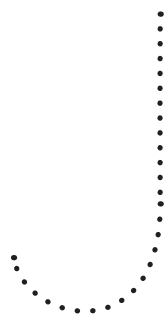
Sledi pikicam in riši črke H.



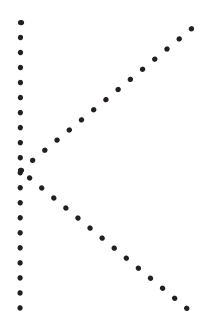
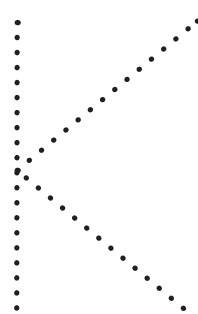
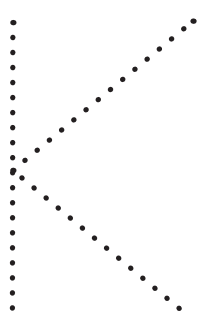
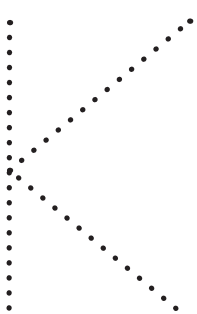
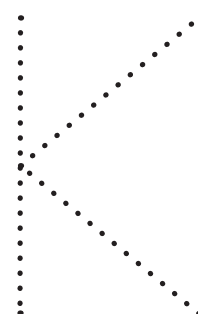
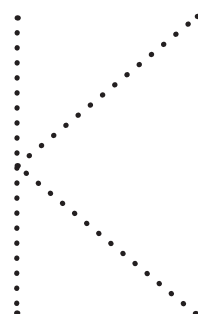
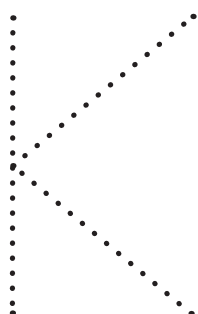
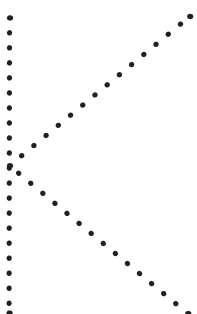
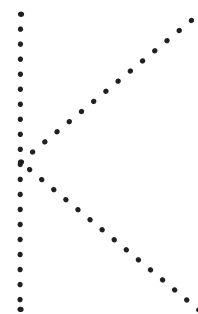
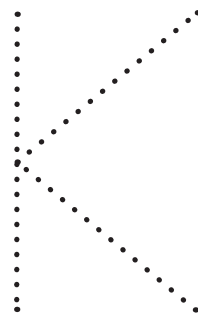
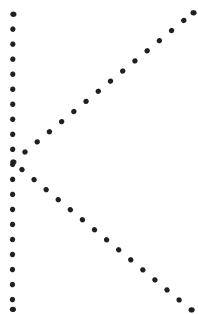
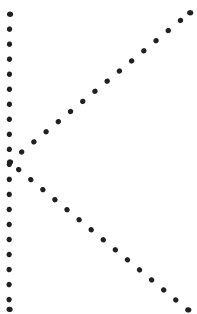
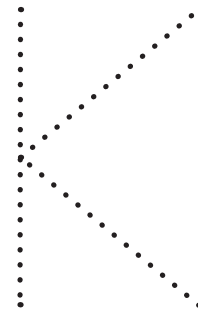
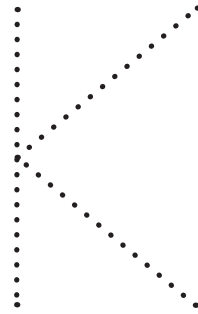
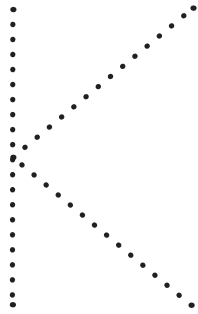
Sledi pikicam in riši črke I.



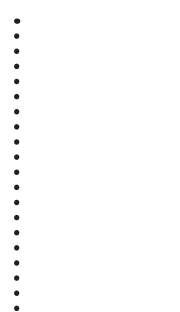
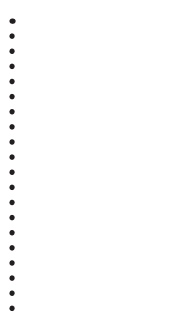
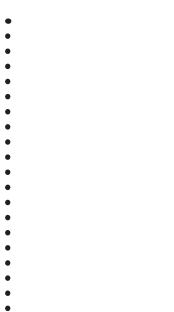
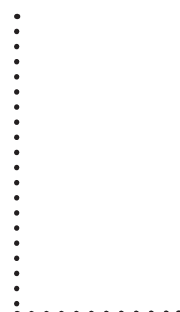
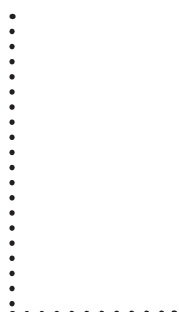
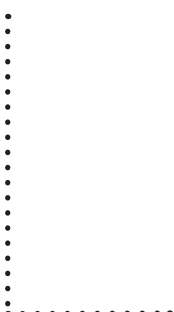
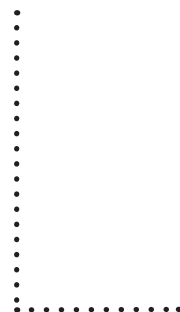
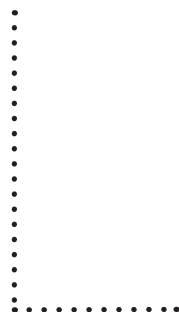
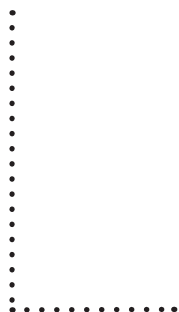
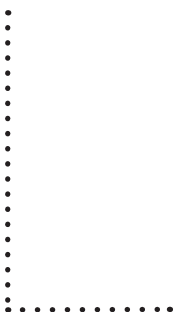
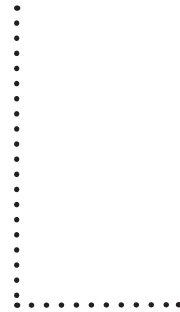
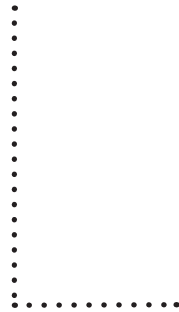
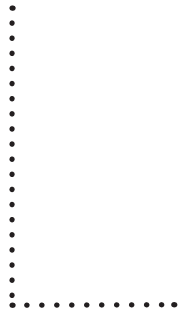
Sledi pikicam in riši črke J.



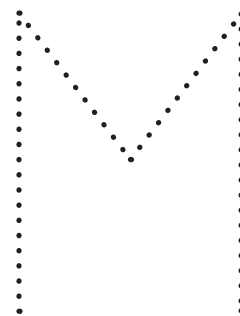
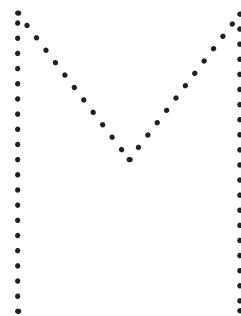
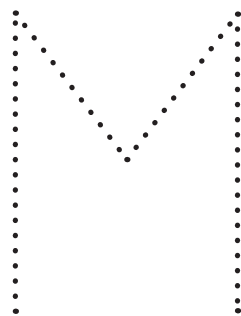
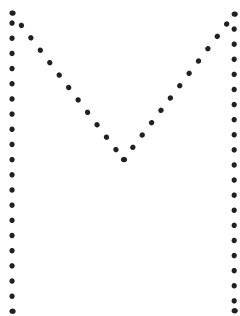
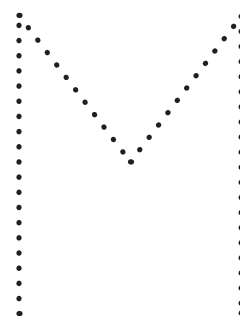
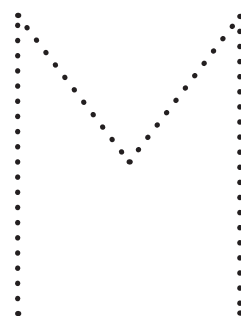
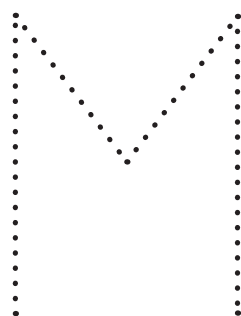
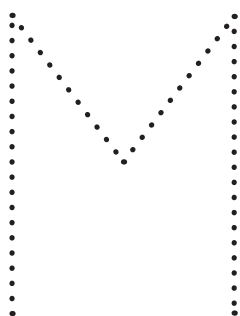
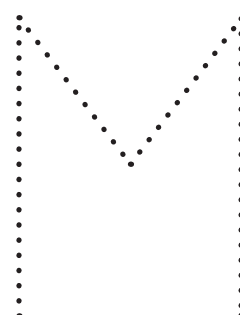
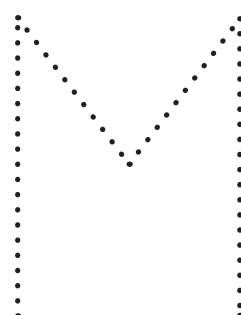
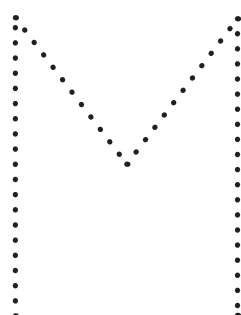
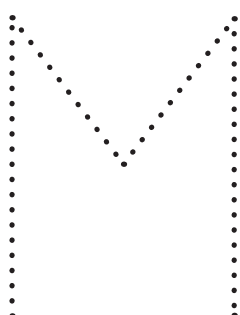
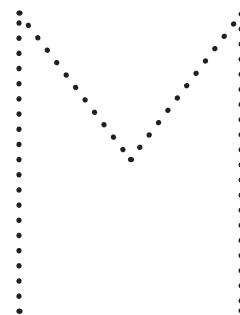
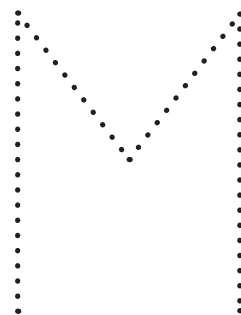
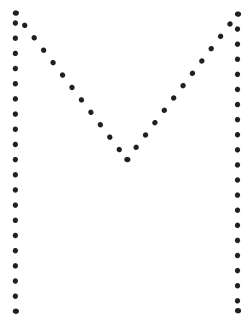
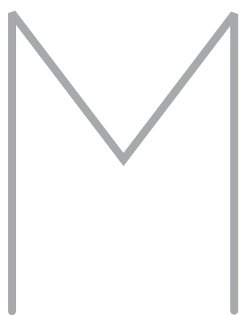
Sledi pikicam in riši črke K.



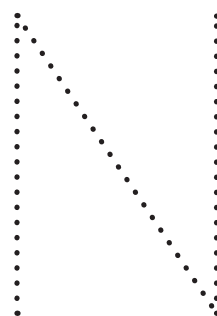
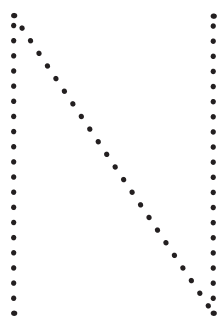
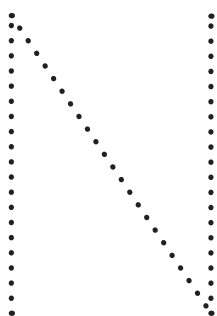
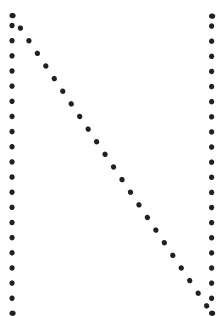
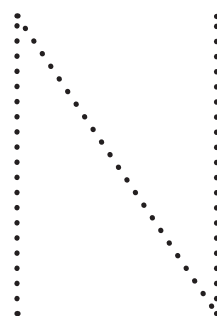
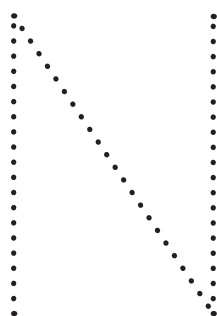
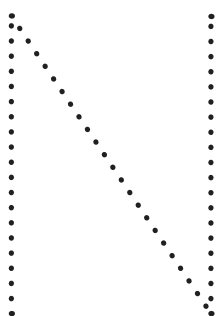
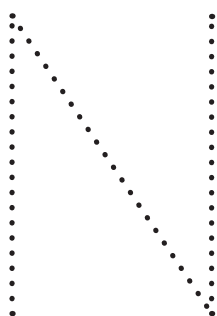
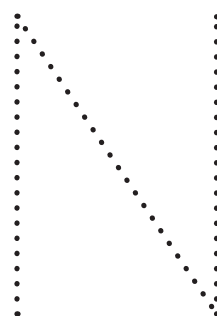
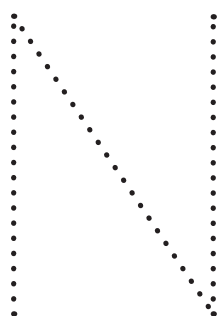
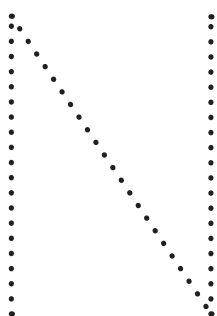
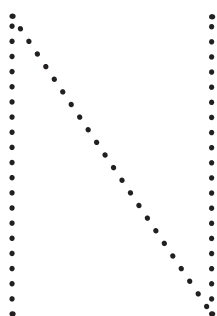
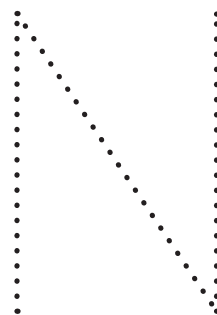
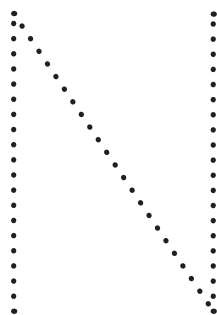
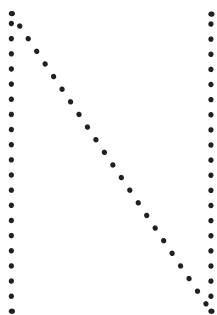
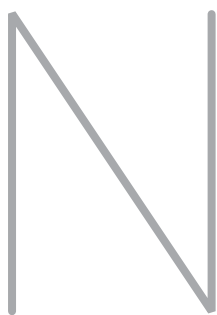
Sledi pikicam in riši črke L.



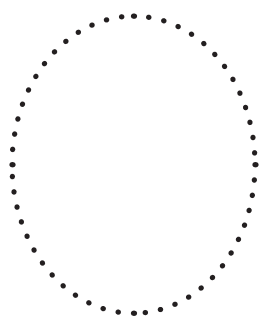
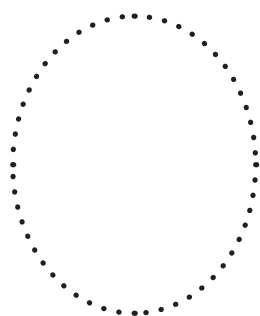
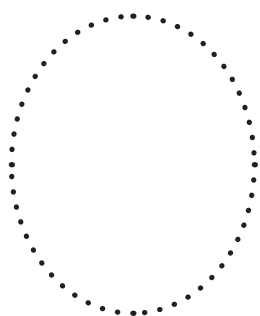
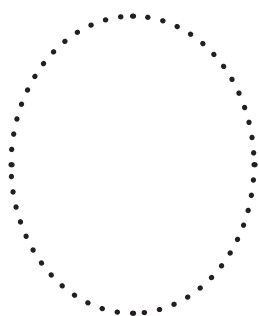
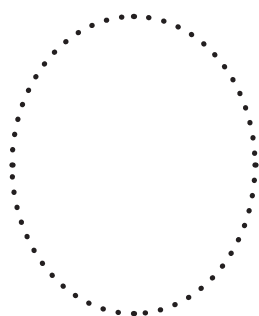
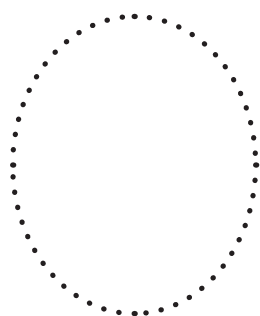
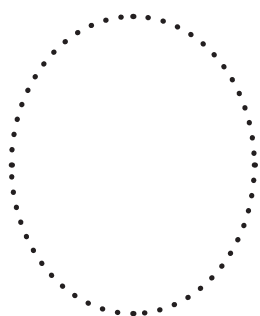
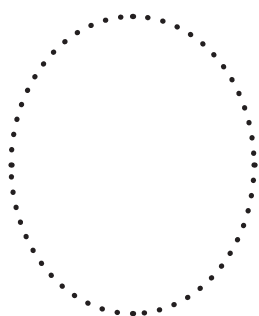
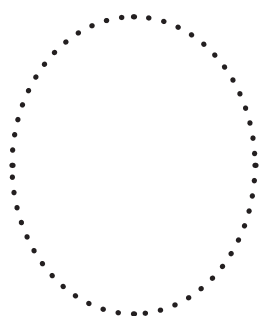
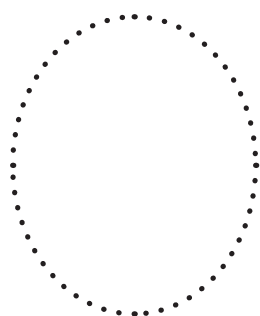
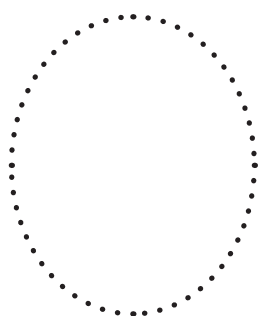
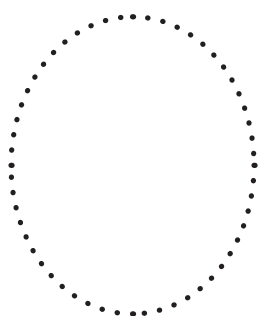
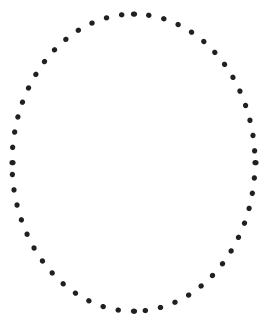
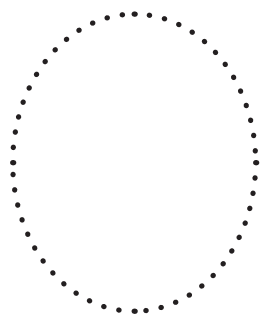
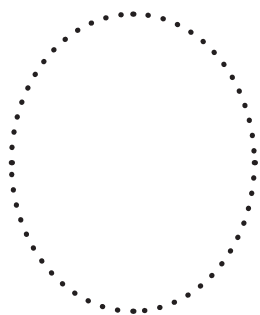
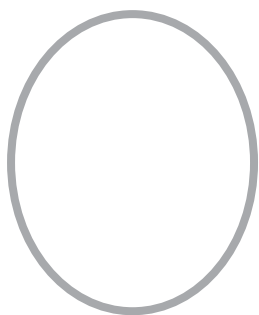
Sledi pikicam in riši črke M.



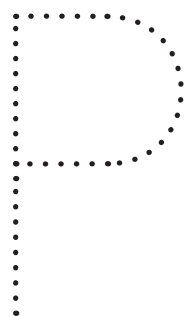
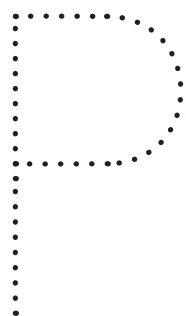
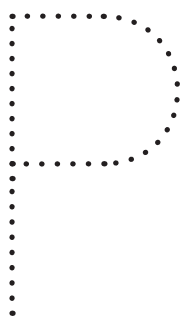
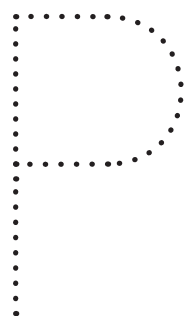
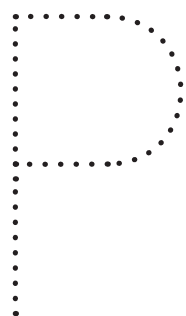
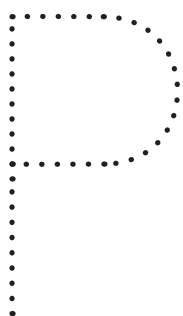
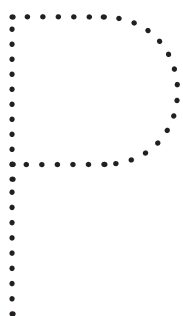
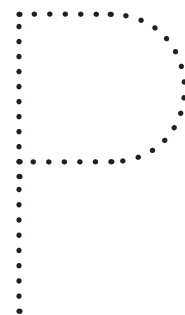
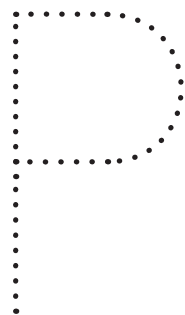
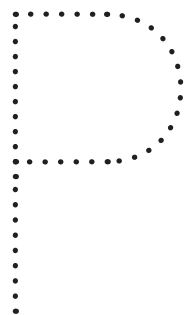
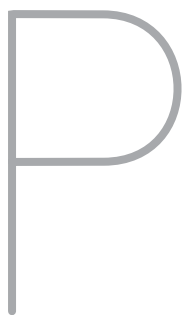
Sledi pikicam in riši črke N.



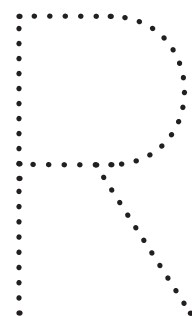
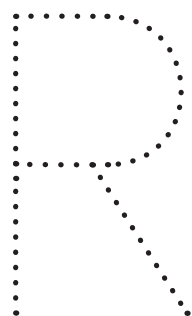
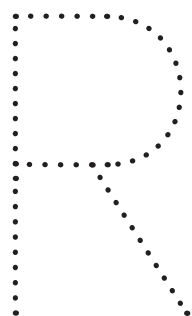
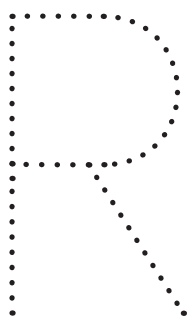
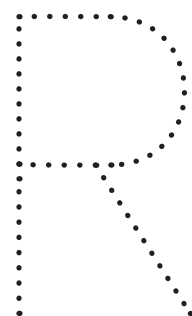
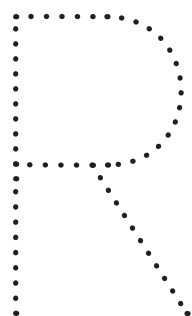
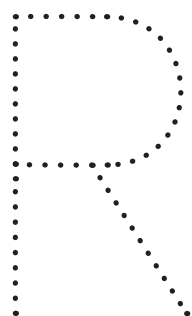
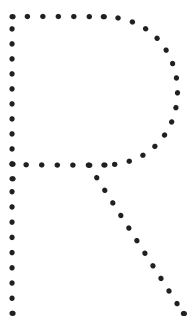
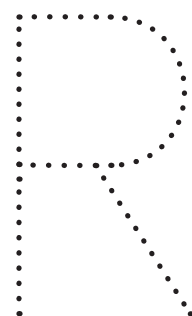
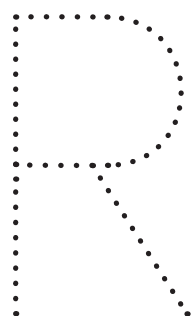
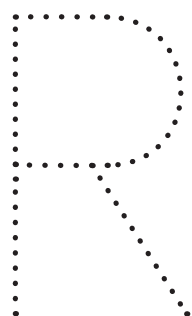
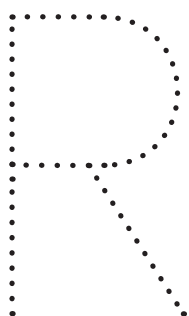
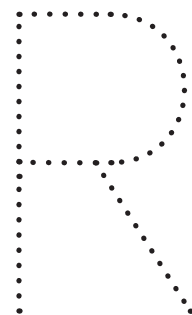
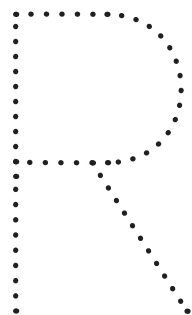
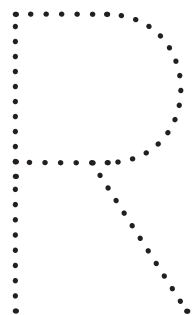
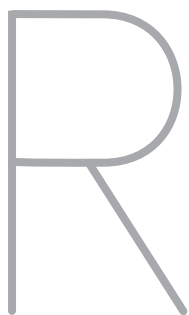
Sledi pikicam in riši črke O.



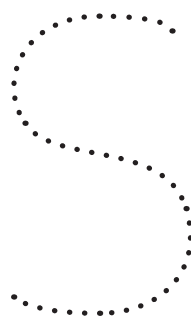
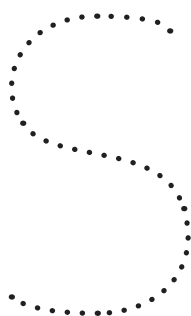
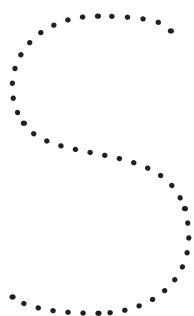
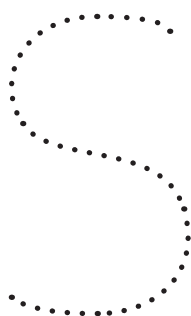
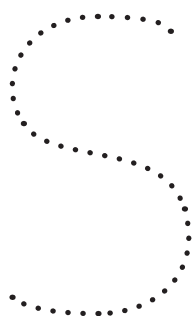
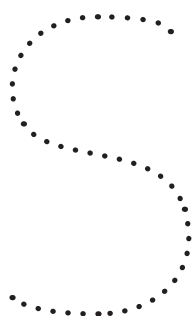
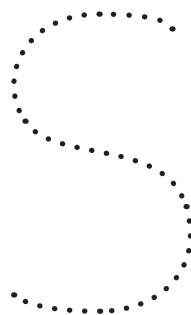
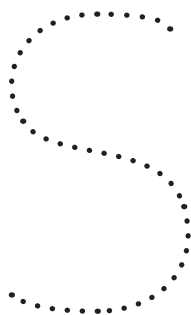
Sledi pikicam in riši črke P.



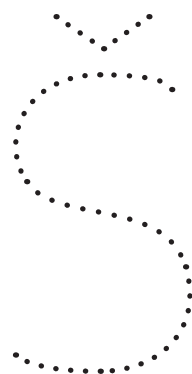
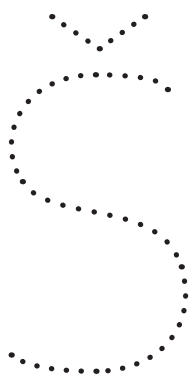
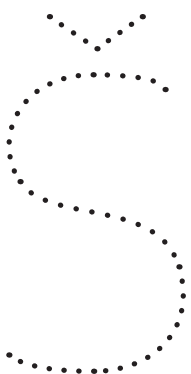
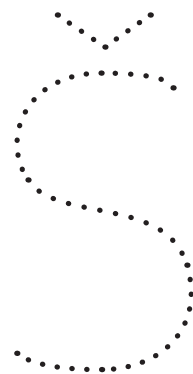
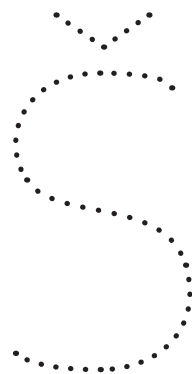
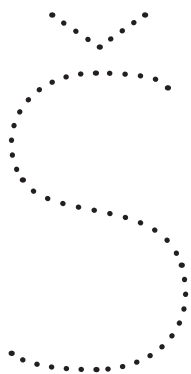
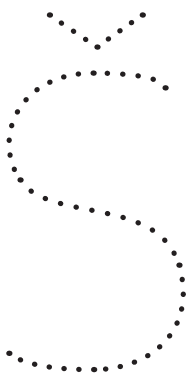
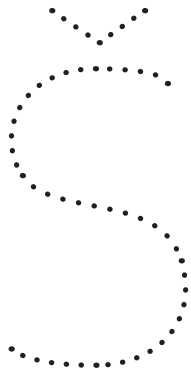
Sledi pikicam in riši črke R.



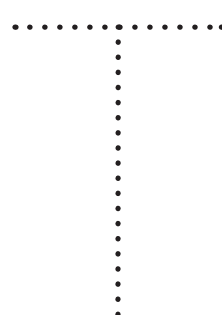
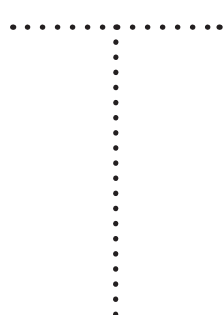
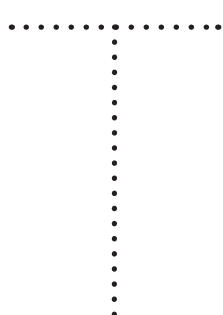
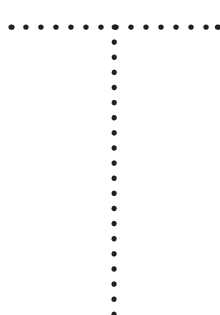
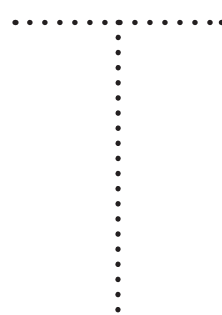
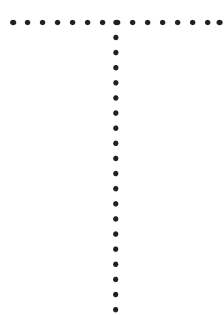
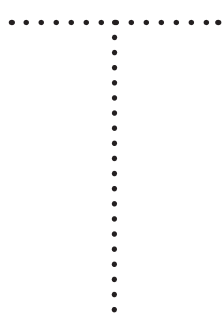
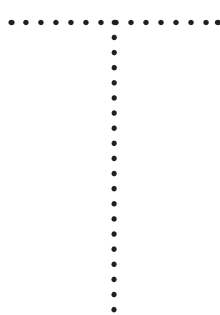
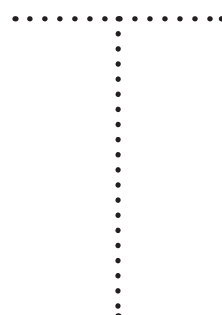
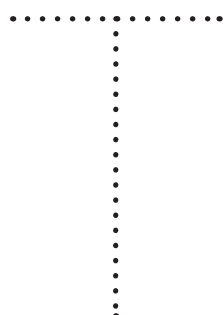
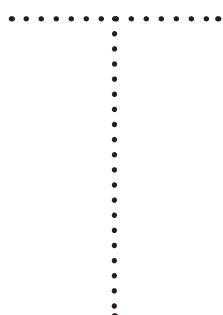
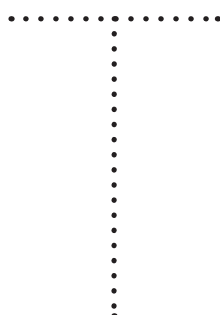
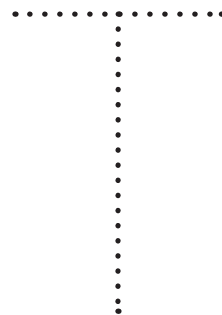
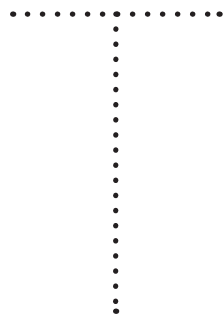
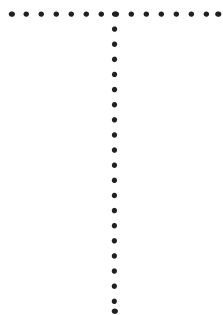
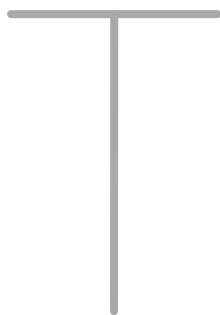
Sledi pikicam in riši črke S.



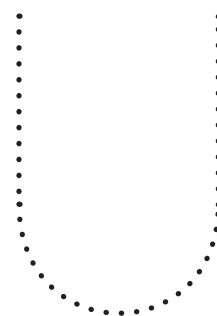
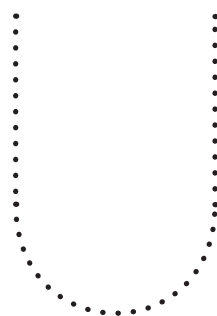
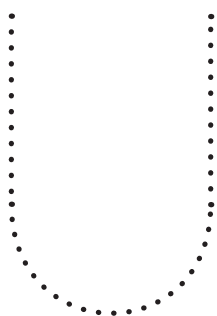
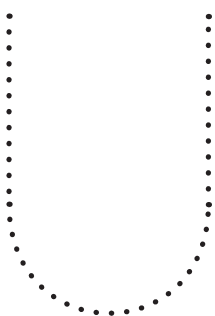
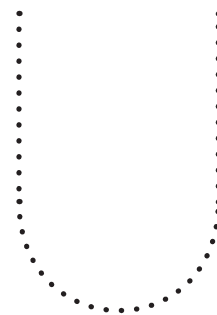
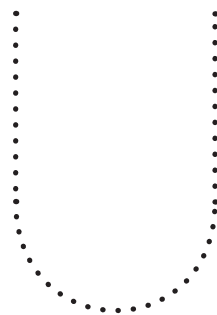
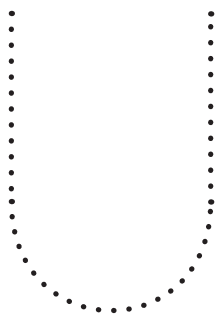
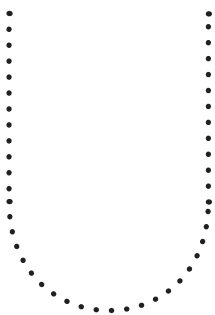
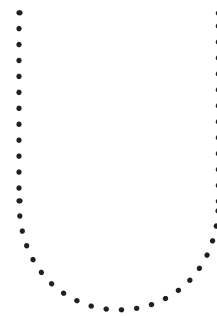
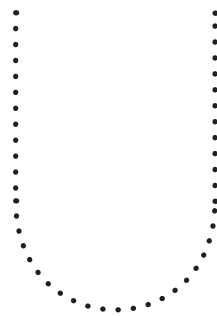
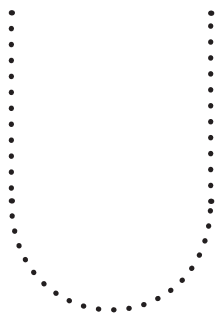
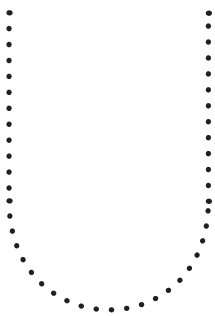
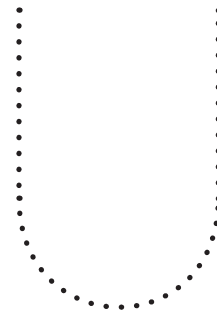
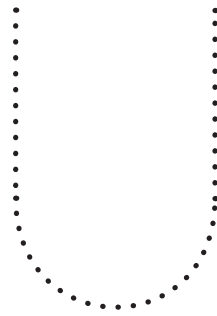
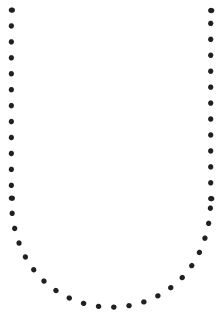
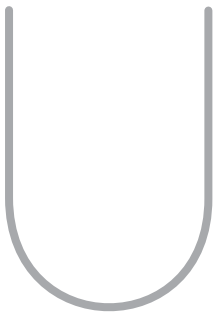
Sledi pikicam in riši črke Š.



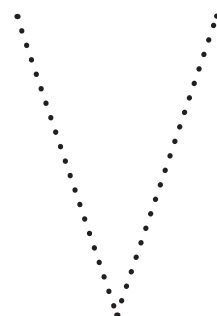
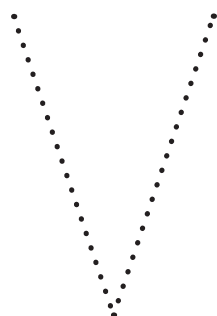
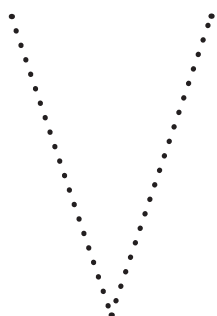
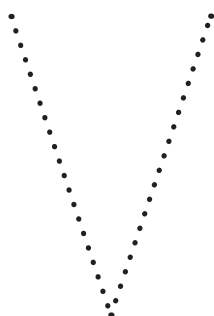
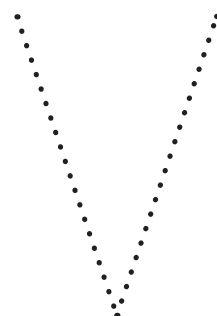
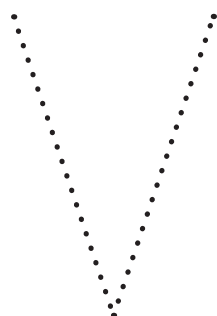
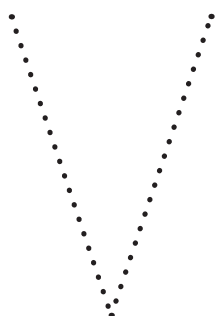
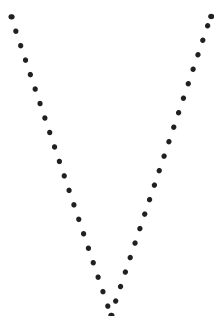
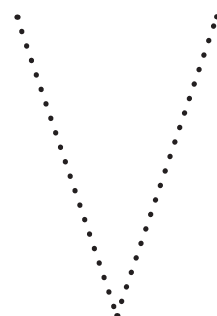
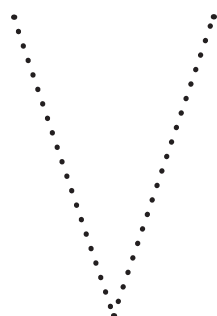
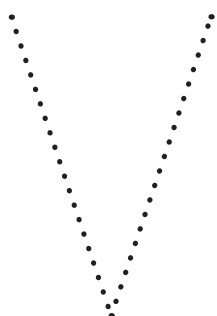
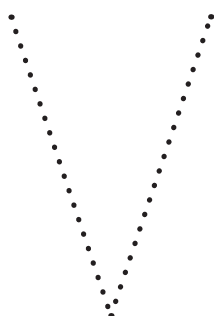
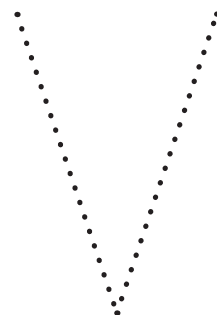
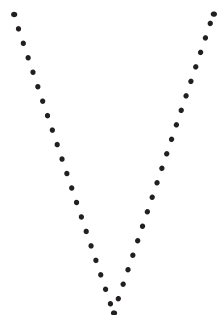
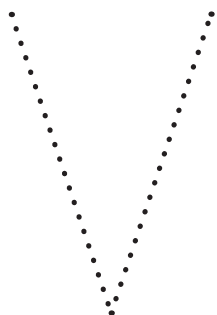
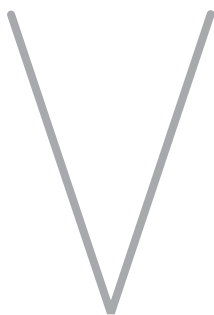
Sledi pikicam in riši črke T.



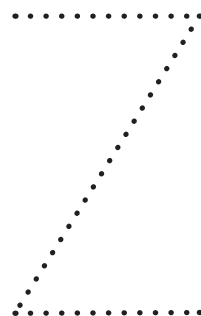
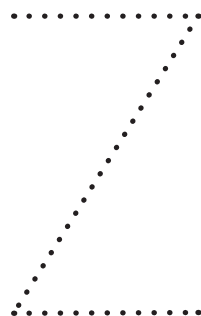
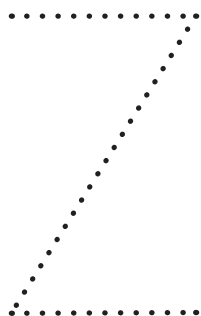
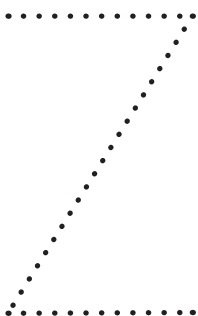
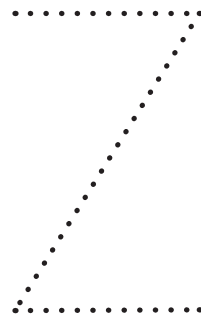
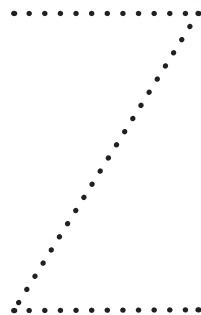
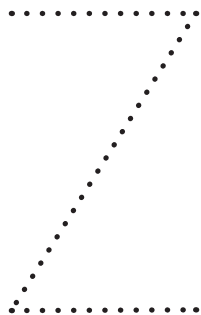
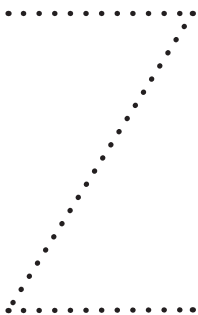
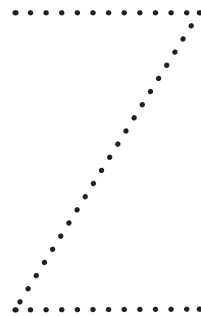
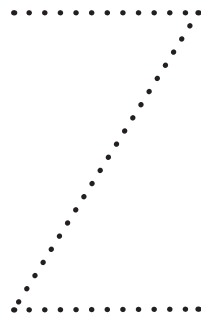
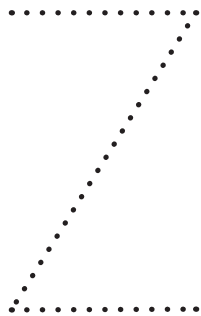
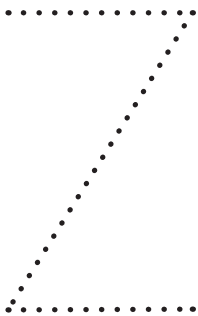
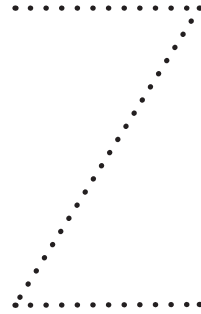
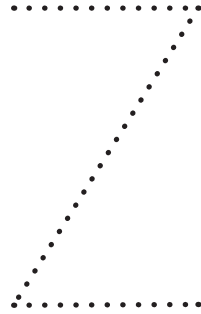
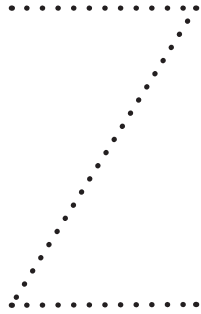
Sledi pikicam in riši črke U.



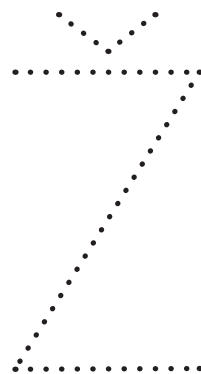
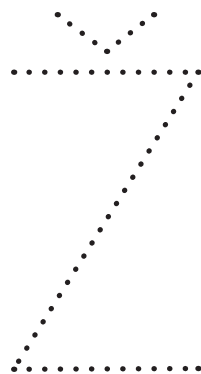
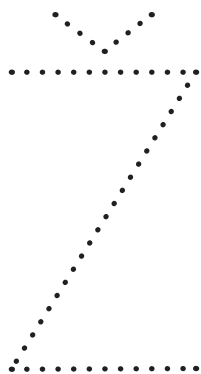
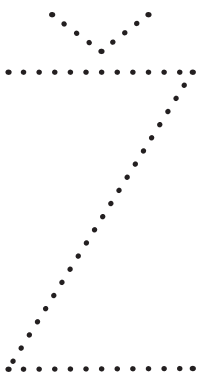
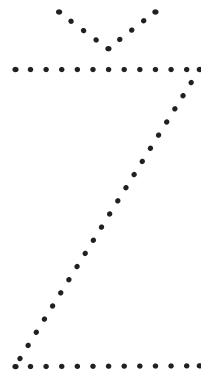
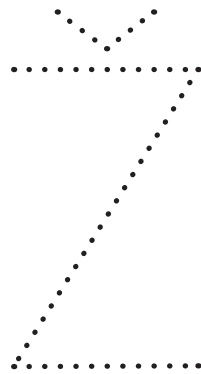
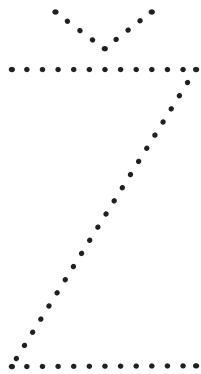
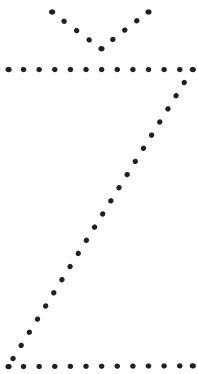
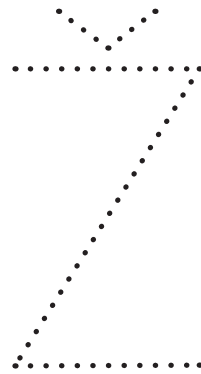
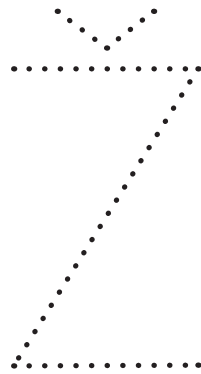
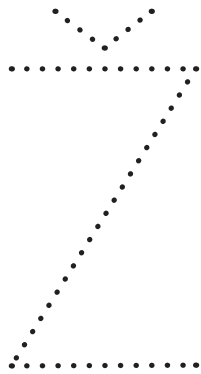
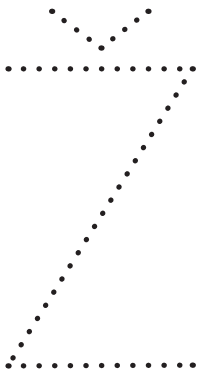
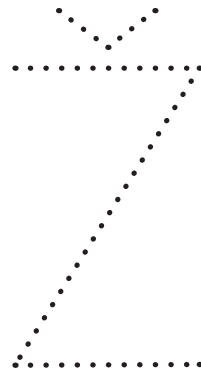
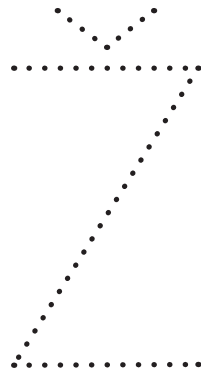
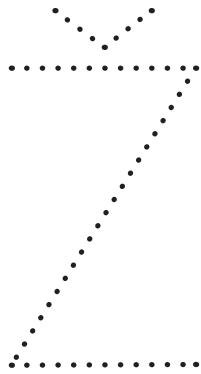
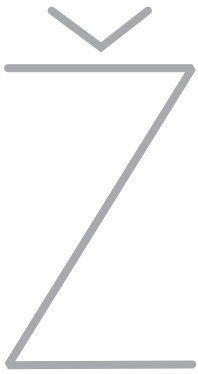
Sledi pikicam in riši črke V.



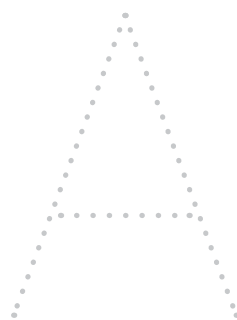
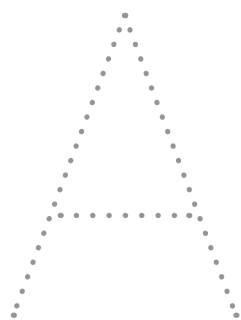
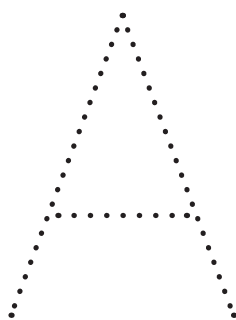
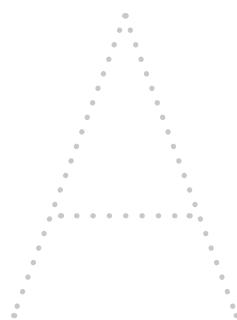
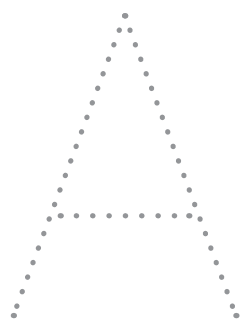
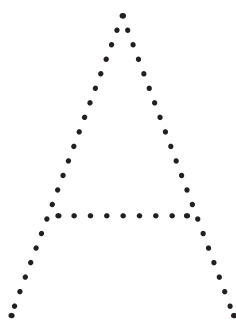
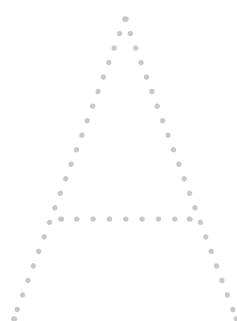
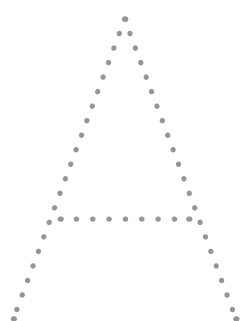
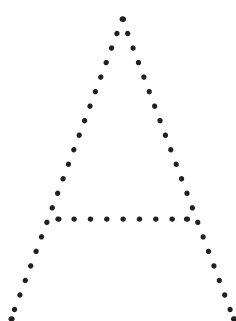
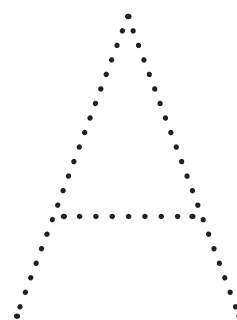
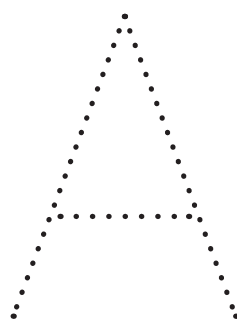
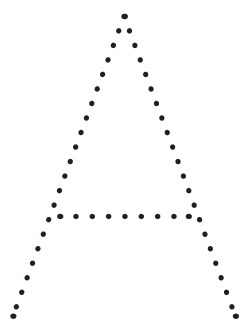
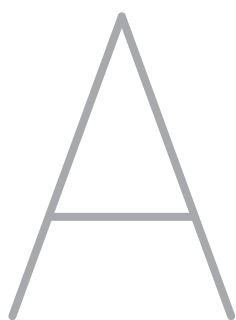
Sledi pikicam in riši črke Z.



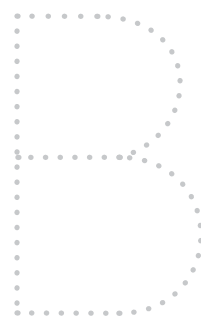
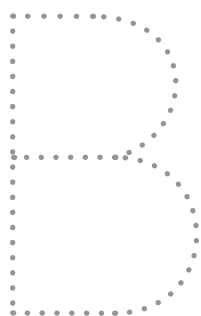
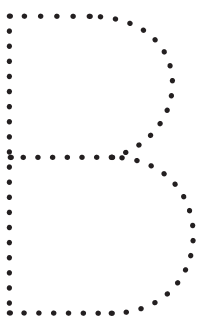
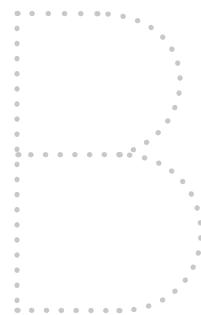
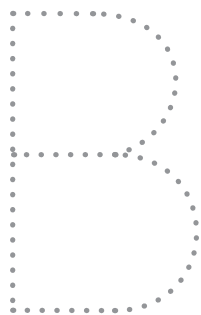
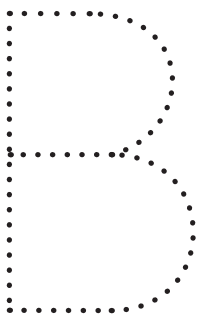
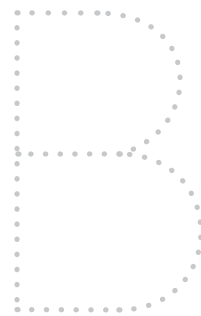
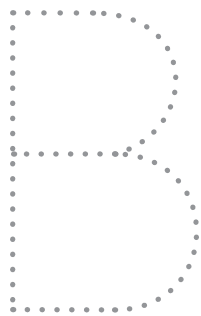
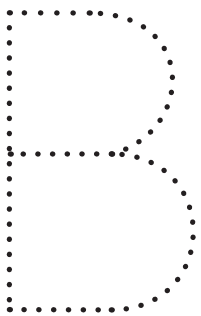
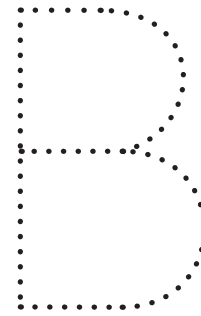
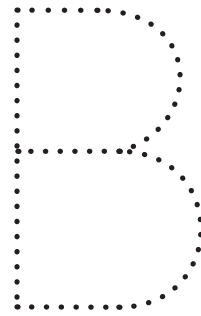
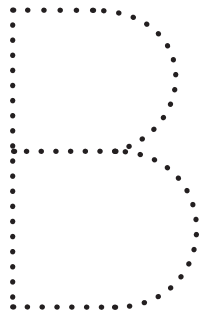
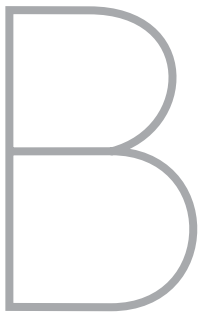
Sledi pikicam in riši črke Ž.



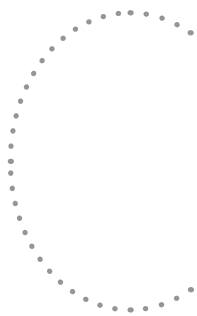
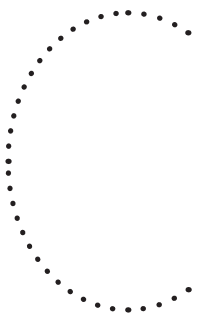
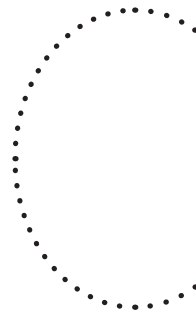
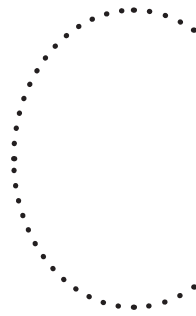
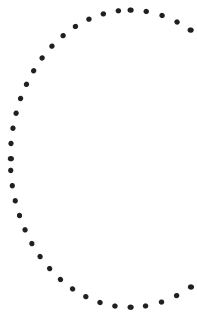
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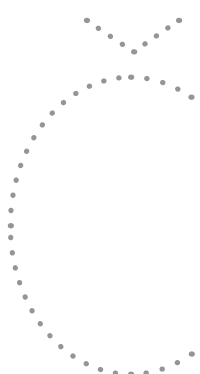
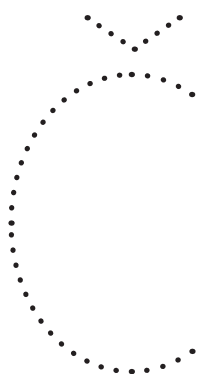
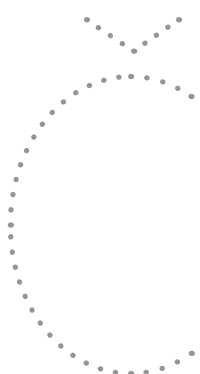
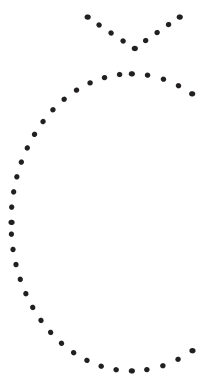
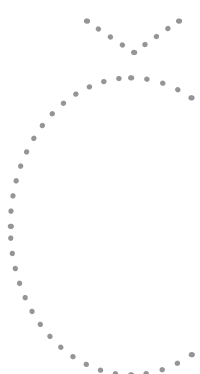
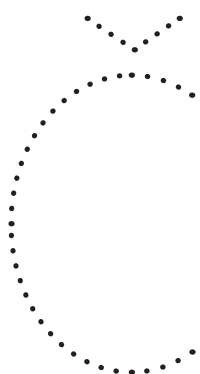
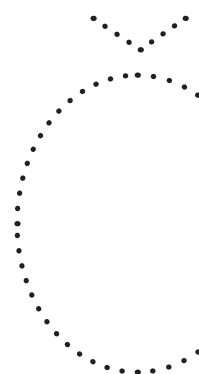
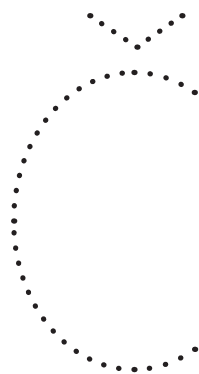
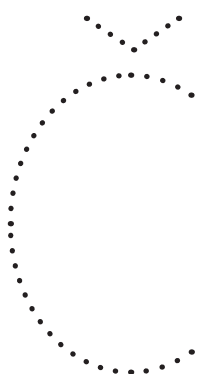
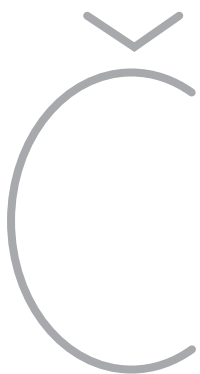
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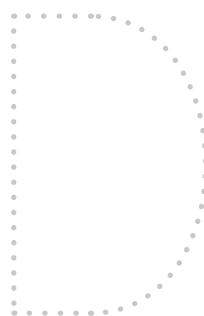
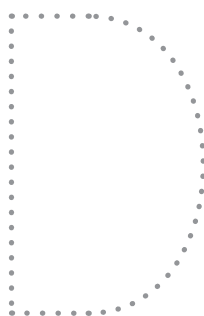
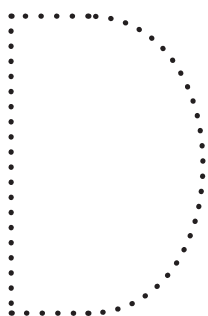
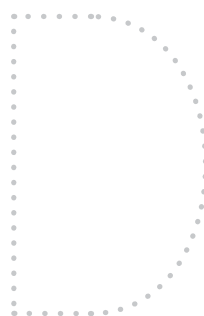
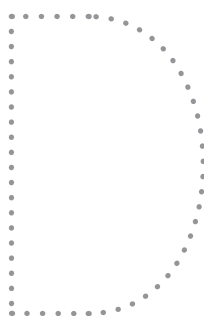
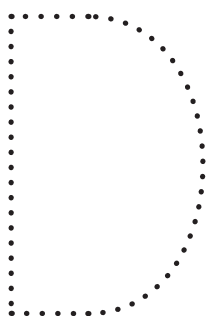
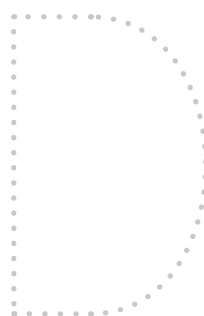
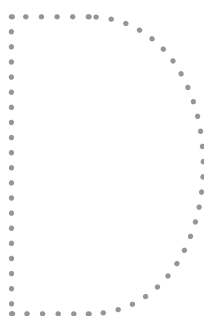
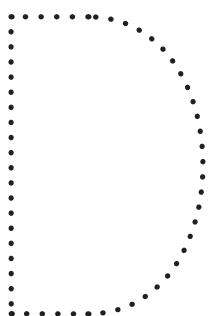
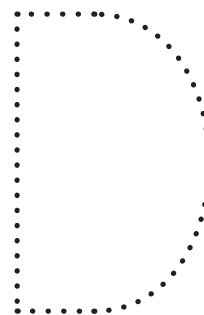
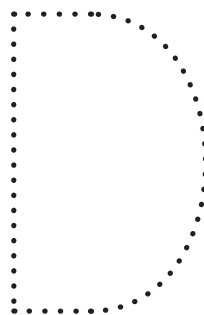
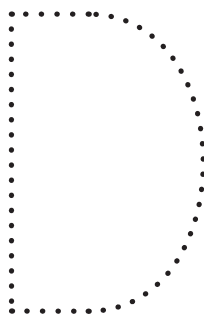
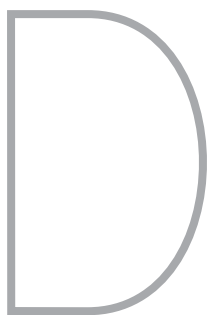
Sledi pikicam in riši črke C.



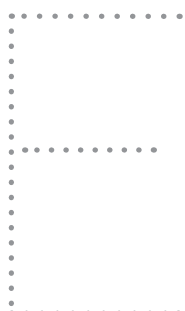
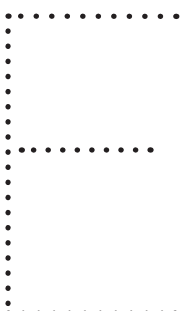
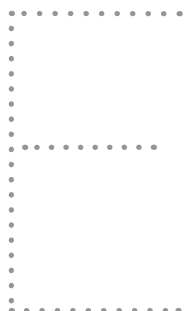
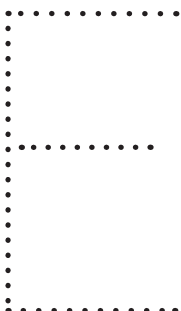
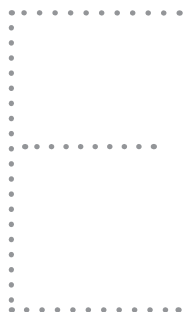
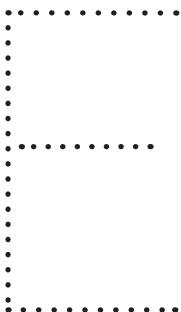
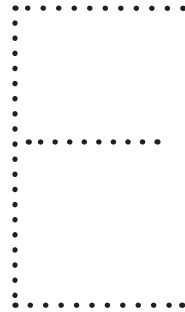
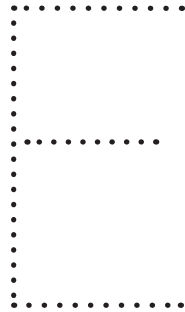
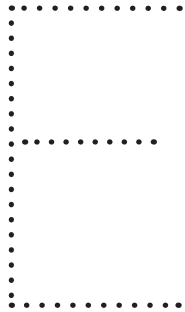
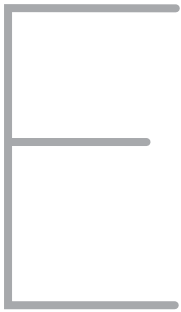
Sledi pikicam in riši črke Č.



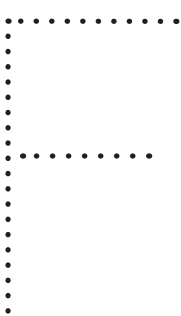
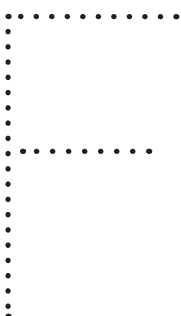
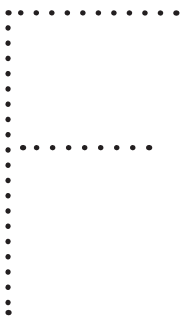
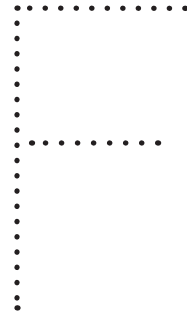
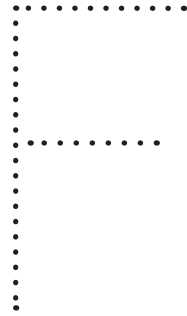
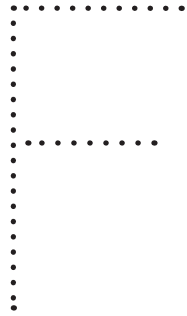
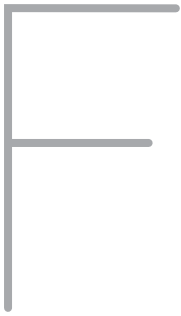
Sledi pikicam in riši črke D.



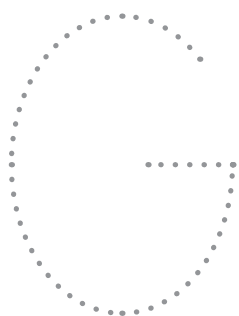
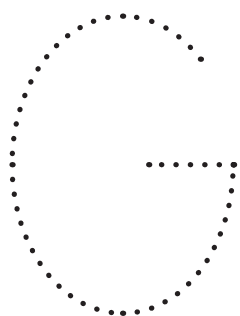
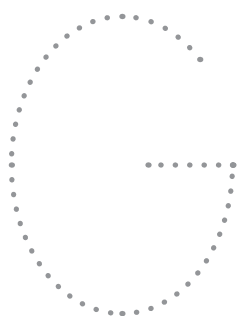
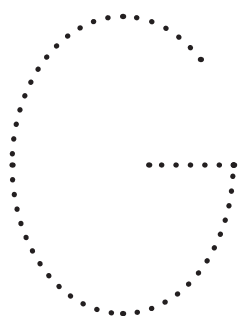
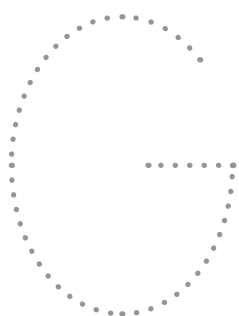
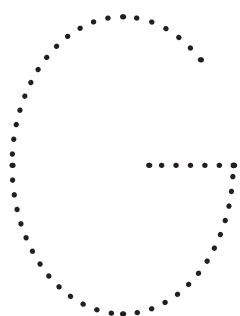
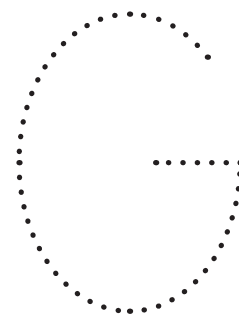
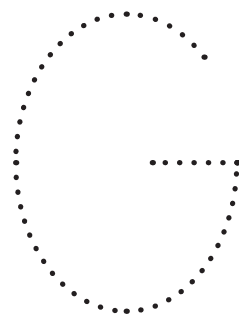
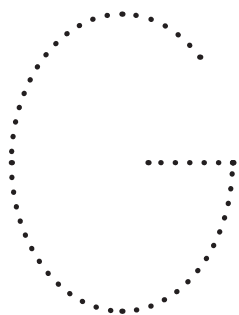
Sledi pikicam in riši črke E.



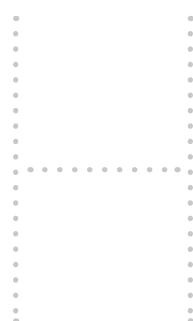
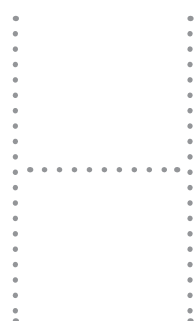
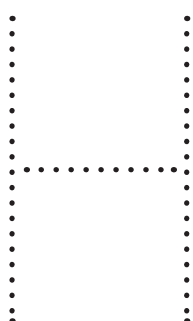
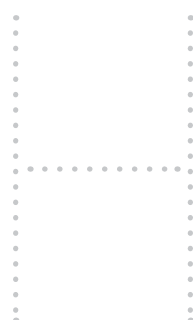
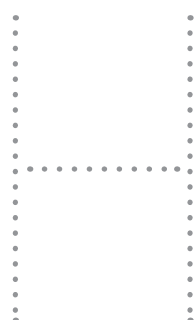
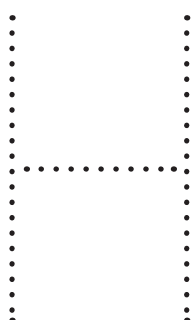
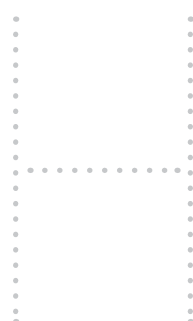
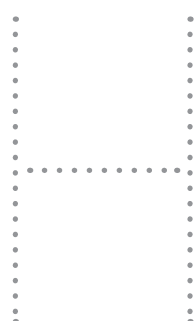
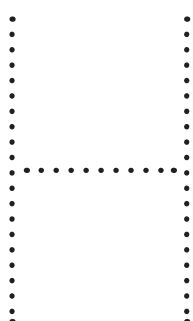
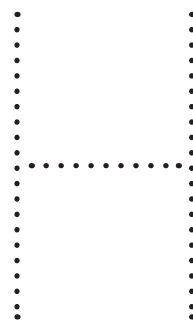
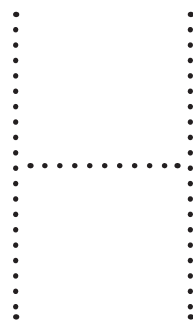
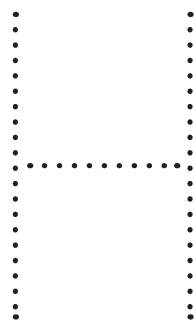
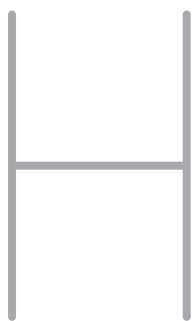
Sledi pikicam in riši črke F.



Sledi pikicam in riši črke G.



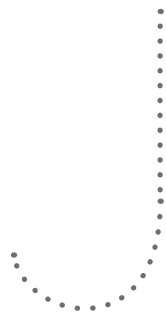
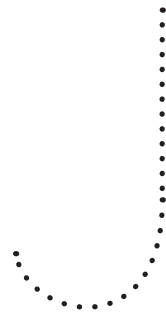
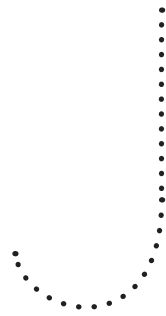
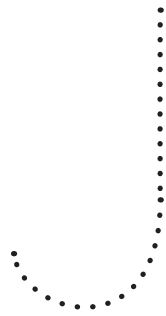
Sledi pikicam in riši črke H.



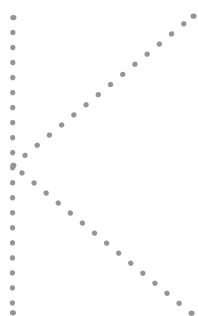
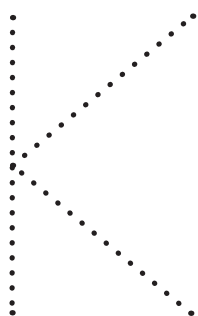
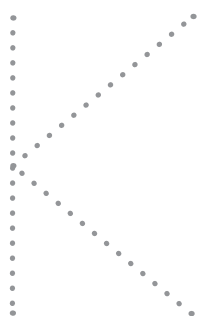
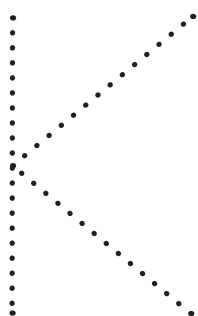
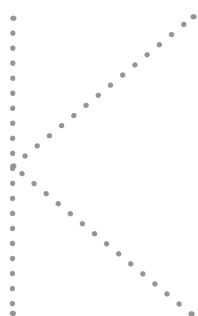
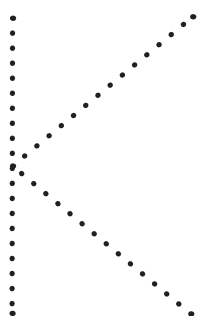
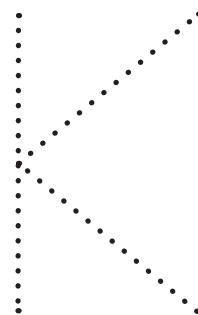
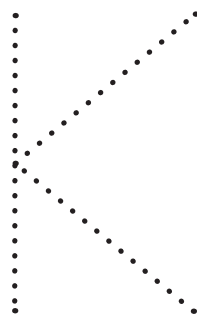
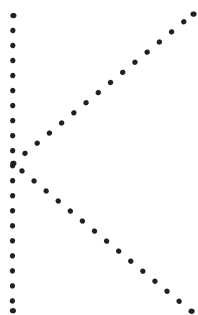
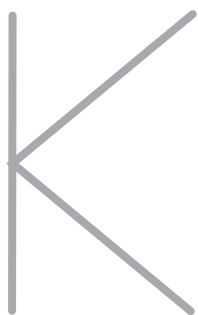
Sledi pikicam in riši črke I.



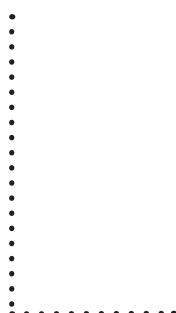
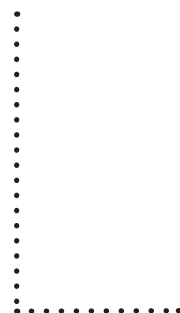
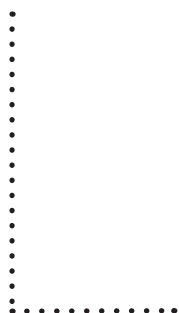
Sledi pikicam in riši črke J.



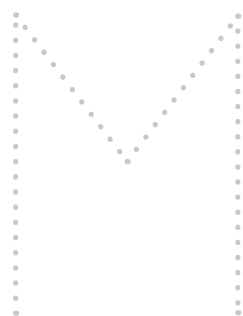
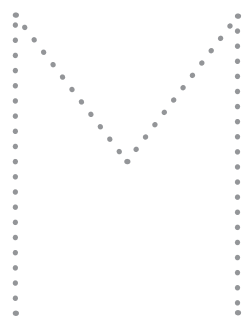
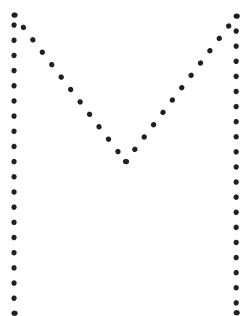
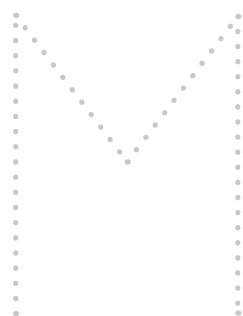
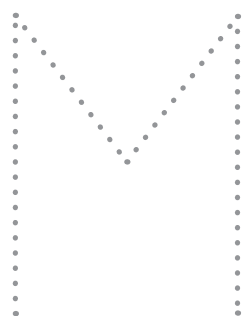
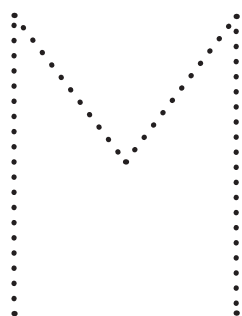
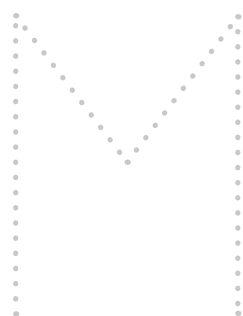
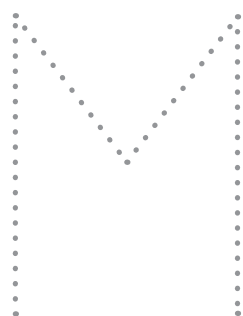
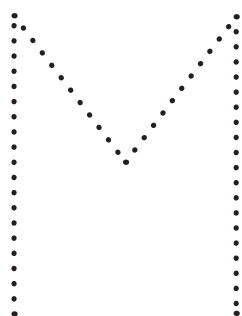
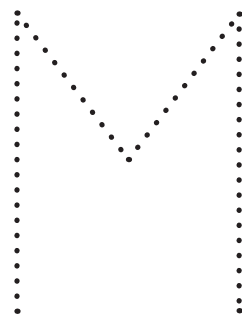
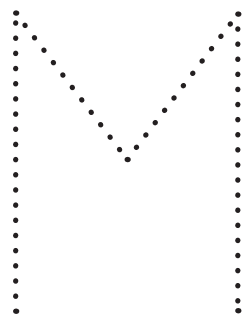
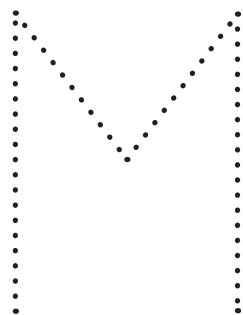
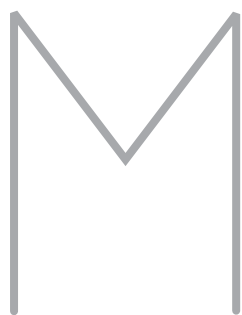
Sledi pikicam in riši črke K.



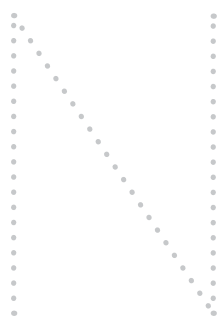
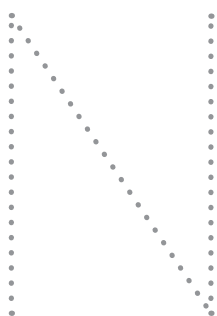
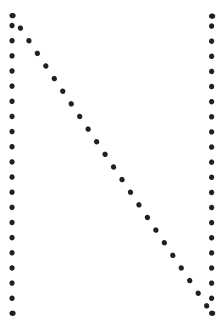
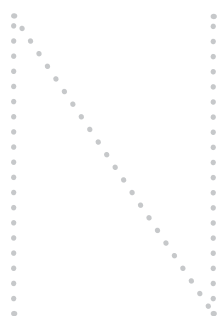
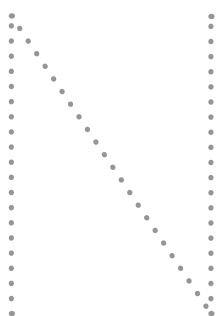
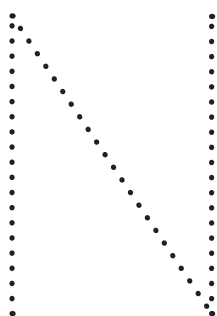
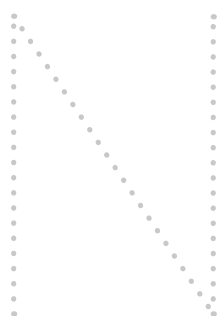
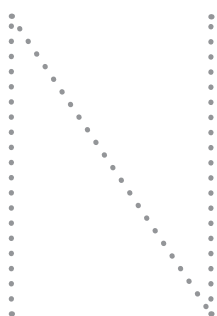
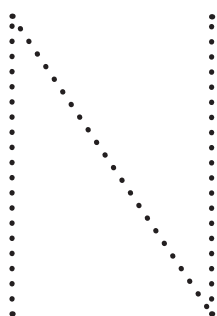
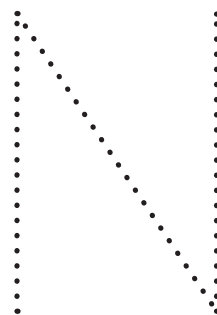
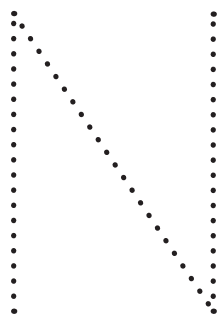
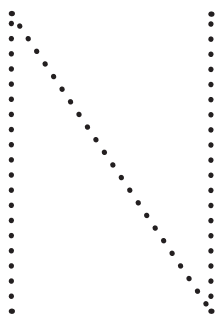
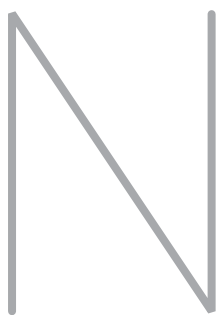
Sledi pikicam in riši črke L.



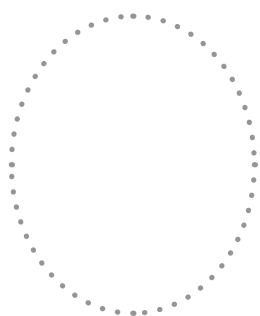
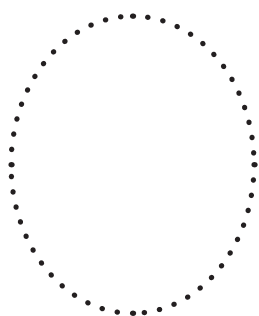
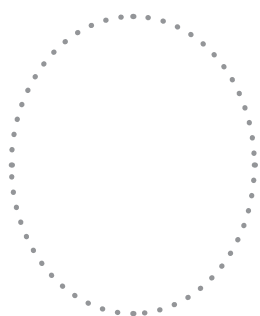
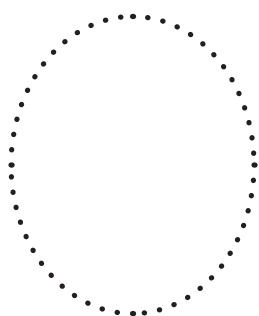
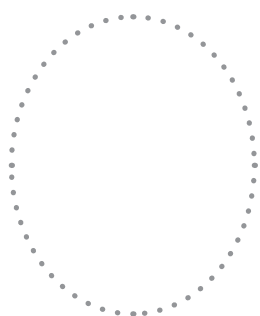
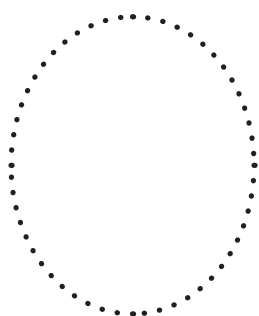
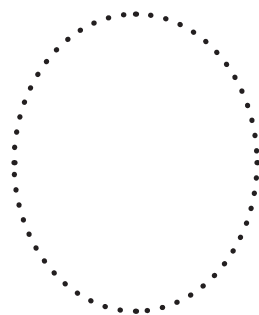
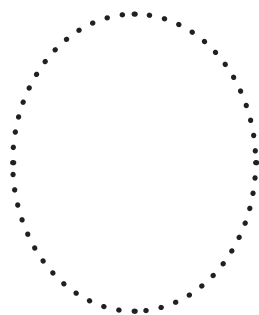
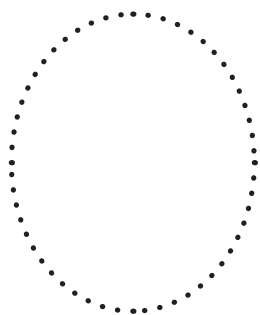
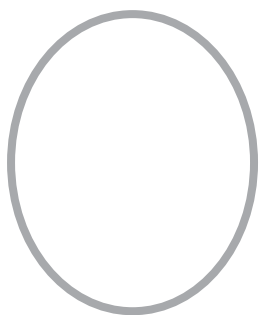
Sledi pikicam in riši črke M.



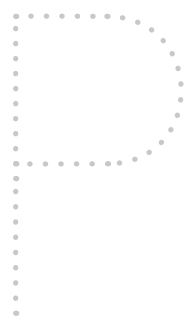
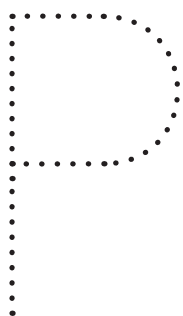
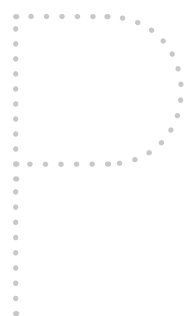
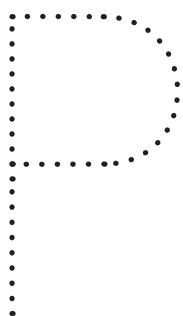
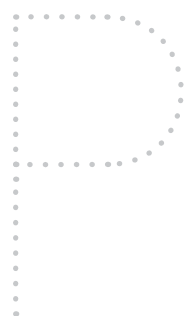
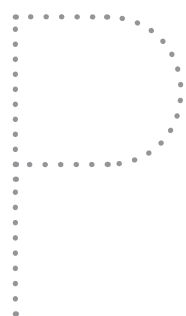
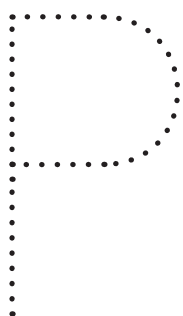
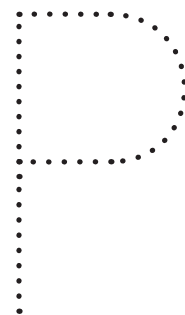
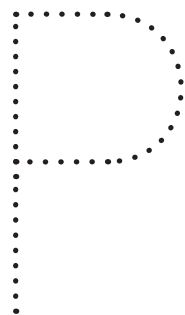
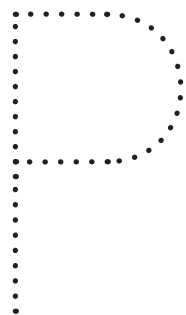
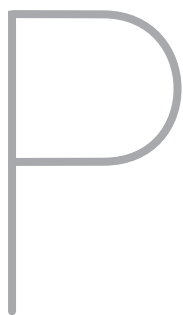
Sledi pikicam in riši črke N.



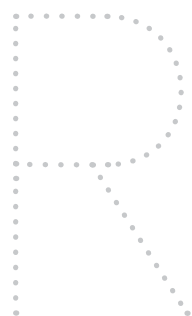
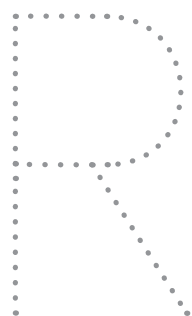
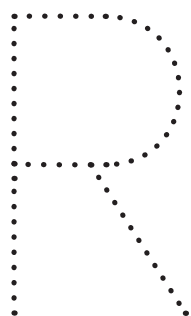
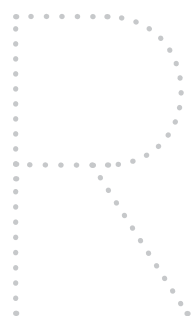
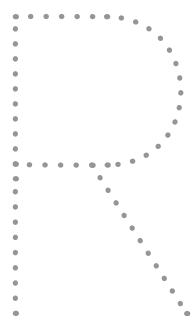
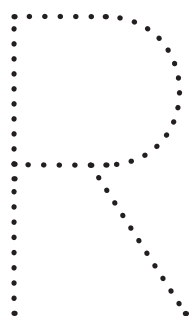
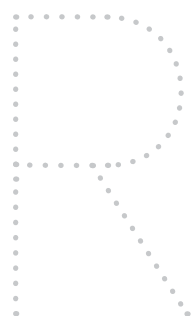
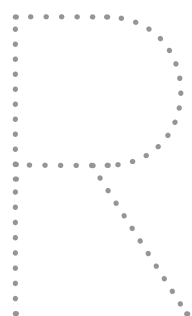
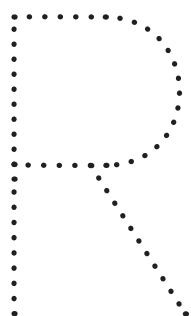
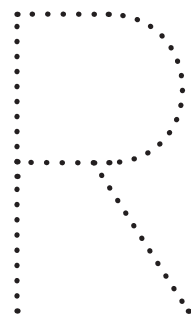
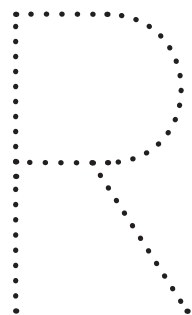
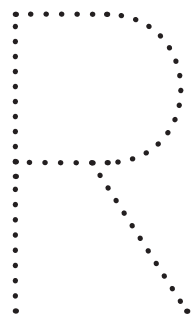
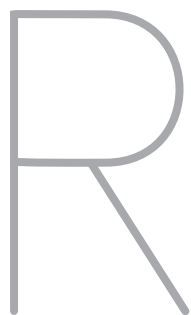
Sledi pikicam in riši črke O.



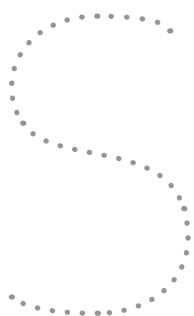
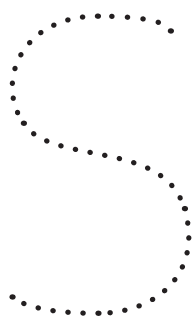
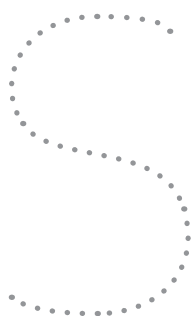
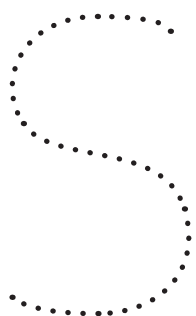
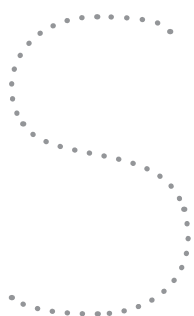
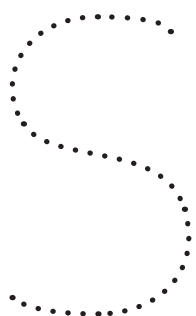
Sledi pikicam in riši črke P.



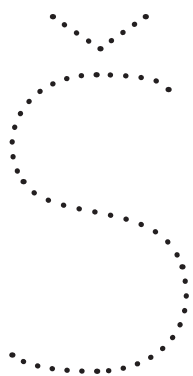
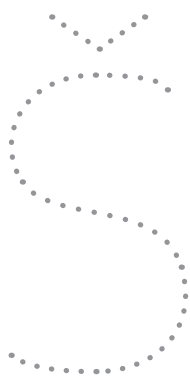
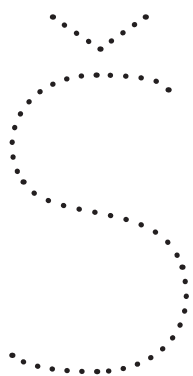
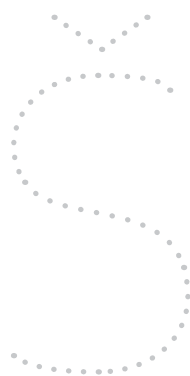
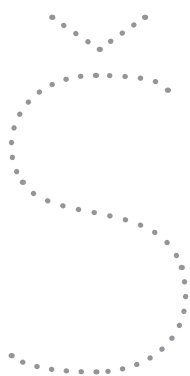
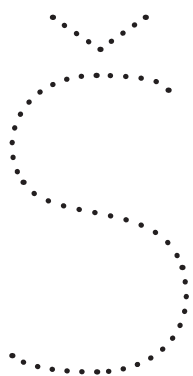
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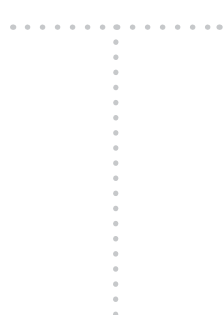
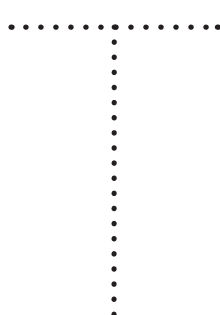
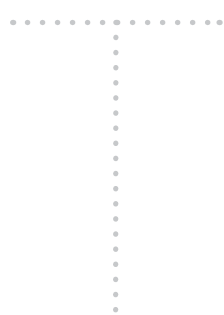
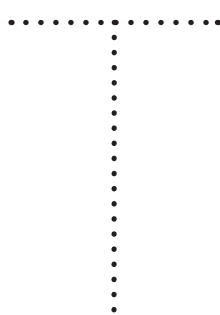
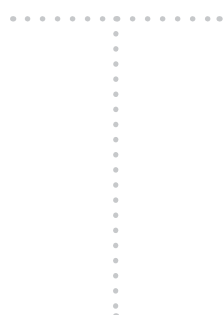
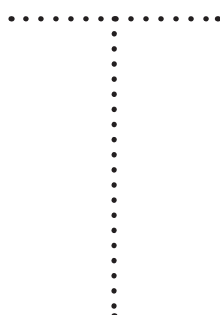
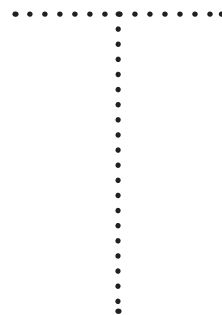
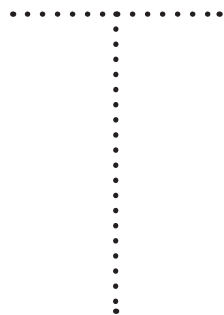
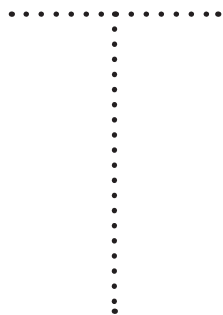
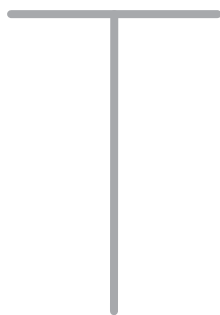
Sledi pikicam in riši črke S.



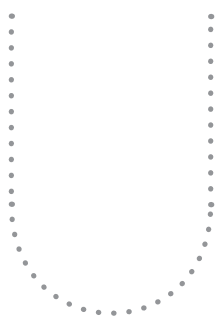
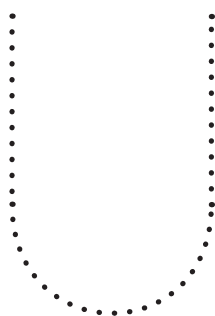
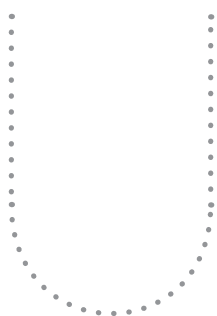
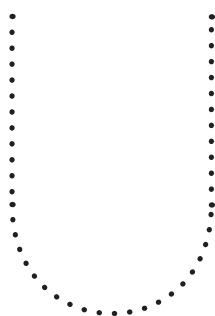
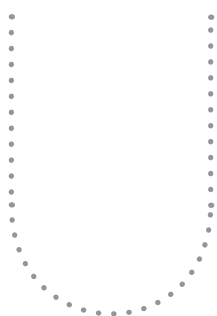
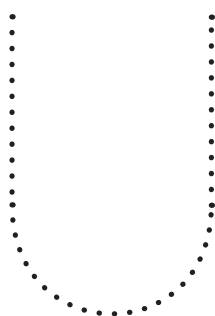
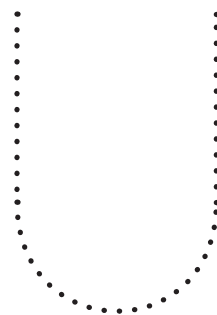
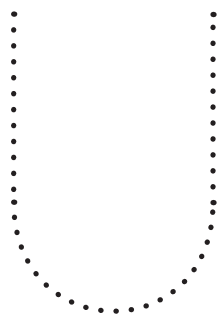
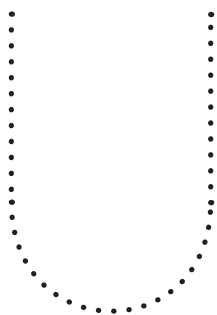
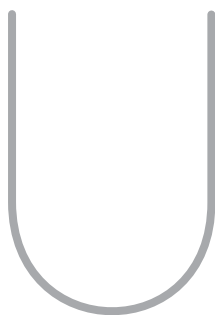
Sledi pikicam in riši črke Š.



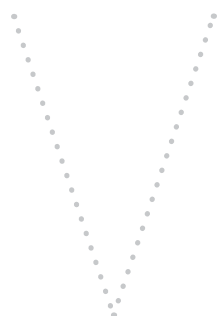
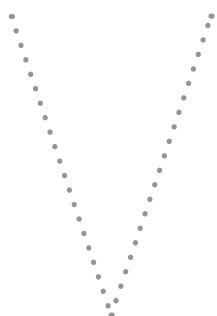
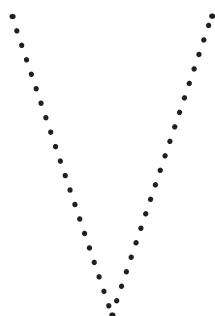
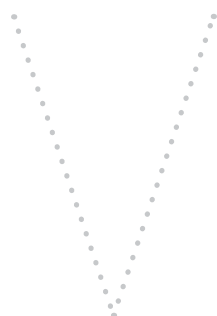
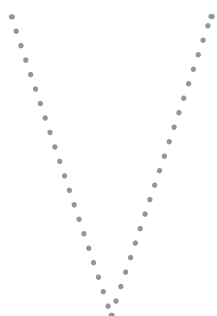
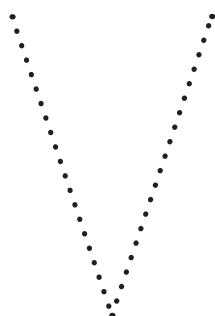
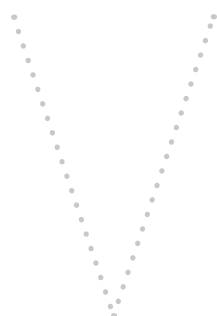
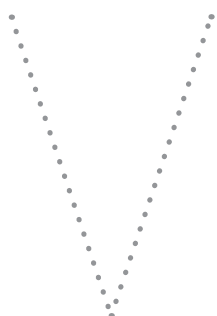
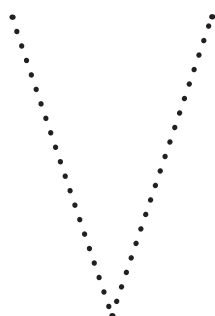
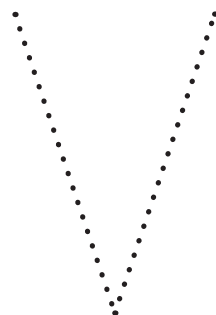
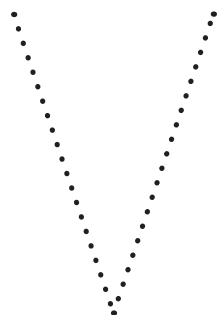
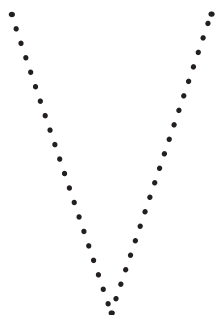
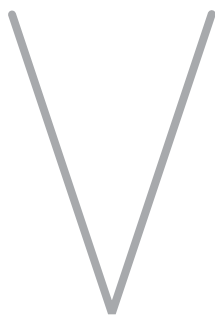
Sledi pikicam in riši črke T.



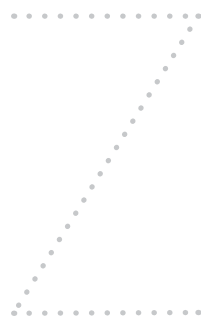
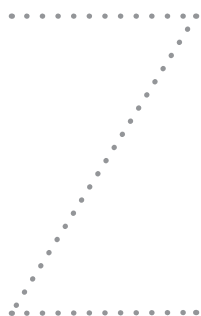
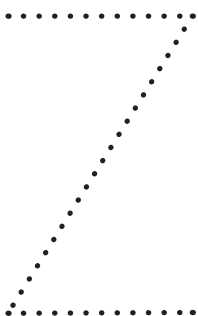
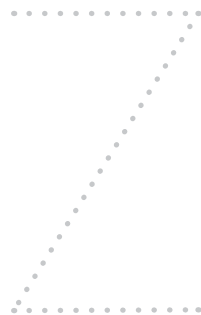
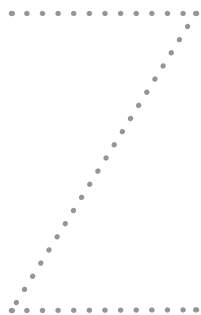
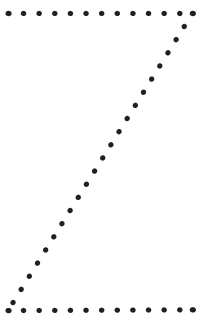
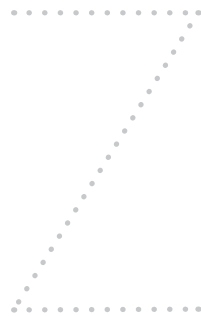
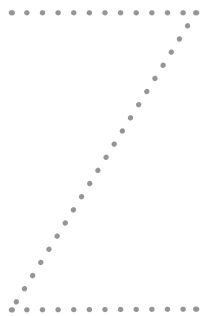
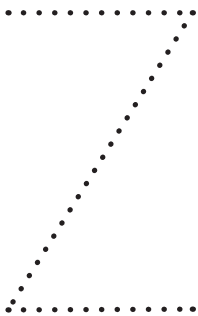
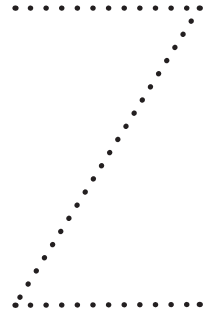
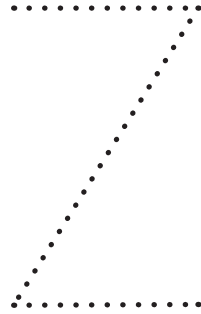
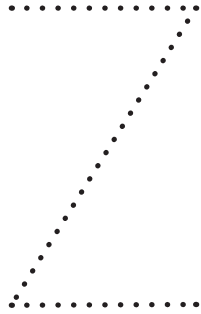
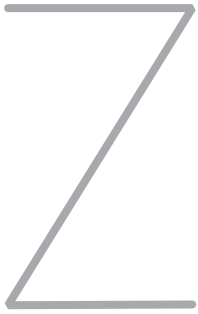
Sledi pikicam in riši črke U.



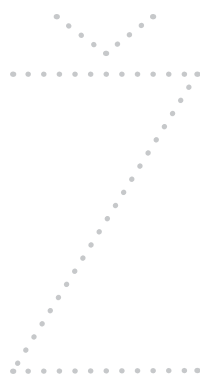
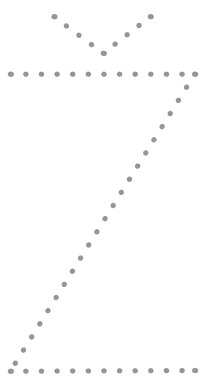
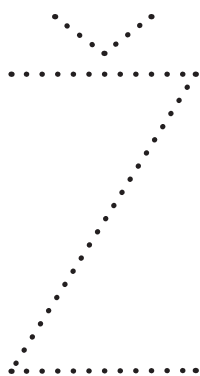
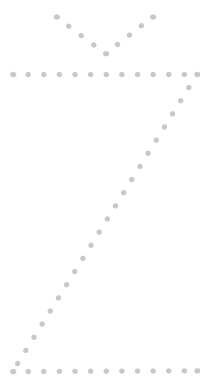
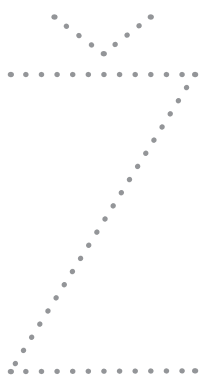
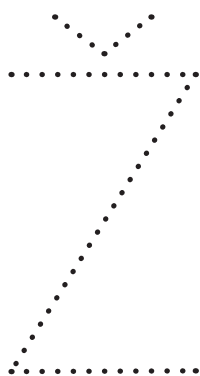
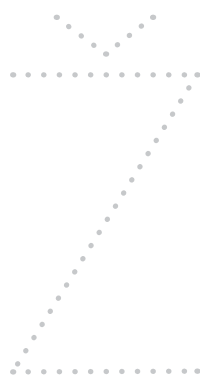
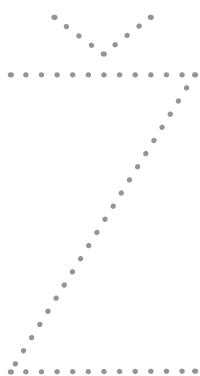
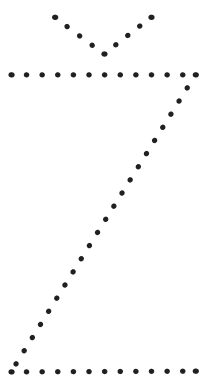
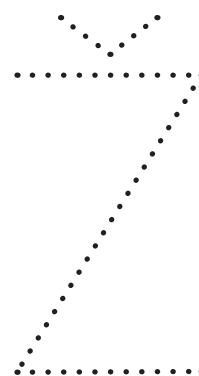
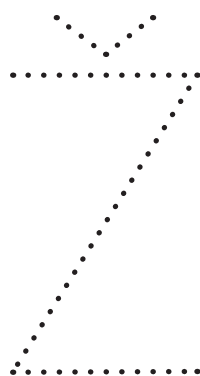
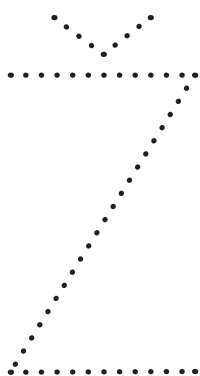
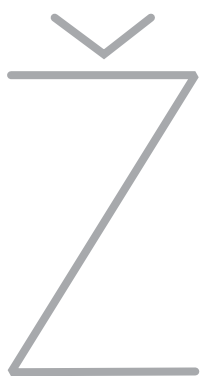
Sledi pikicam in riši črke V.



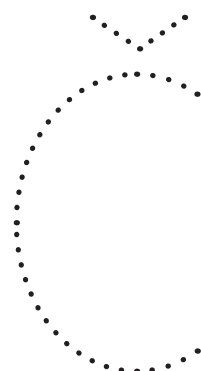
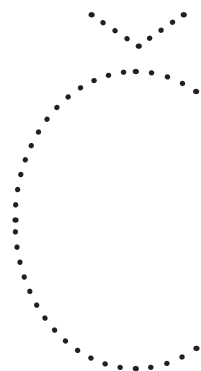
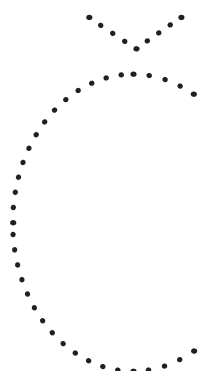
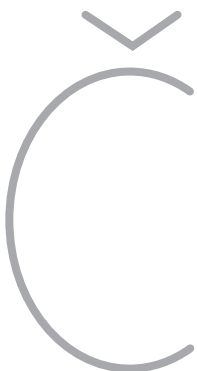
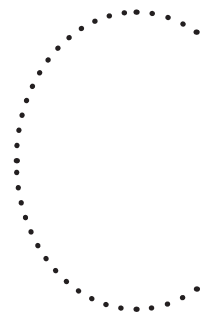
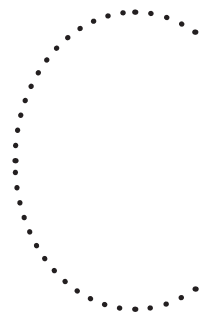
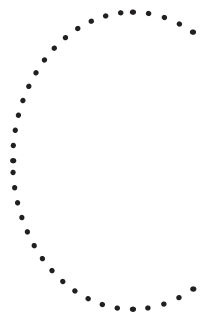
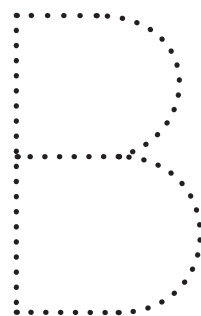
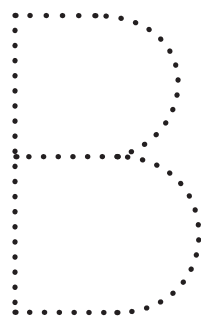
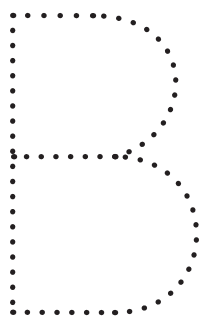
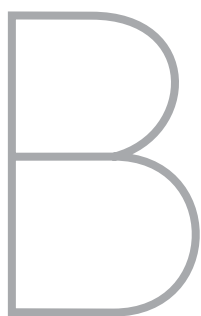
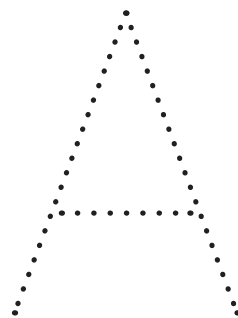
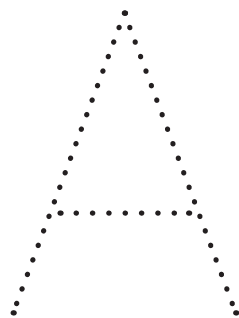
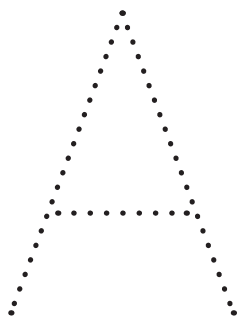
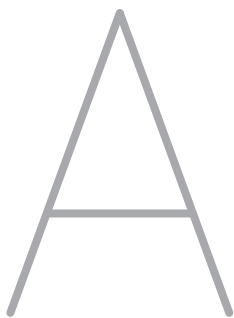
Sledi pikicam in riši črke Z.



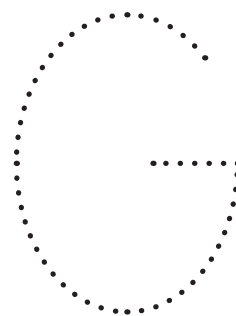
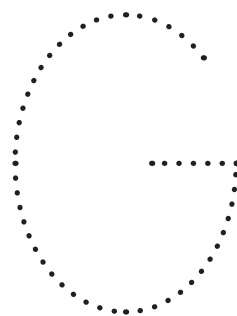
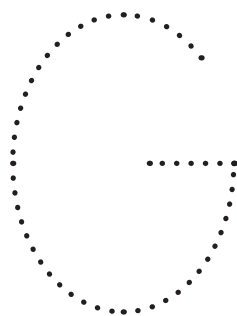
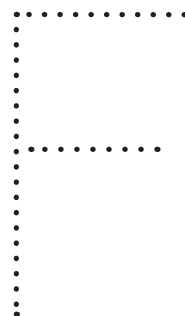
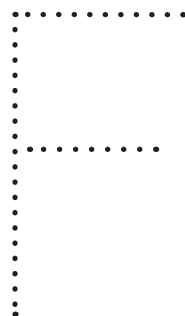
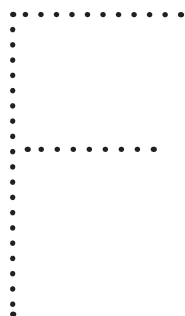
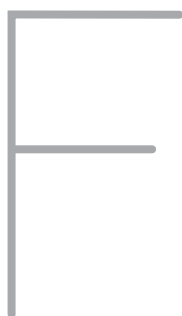
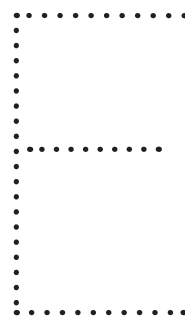
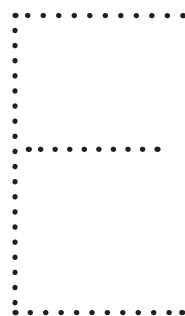
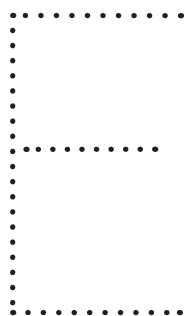
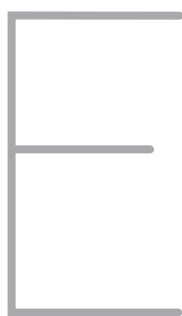
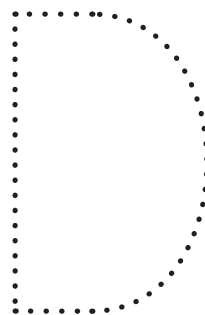
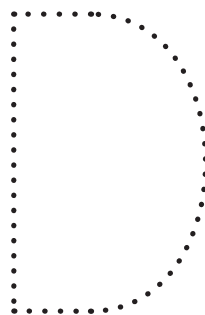
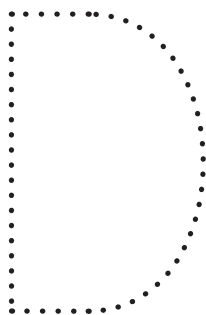
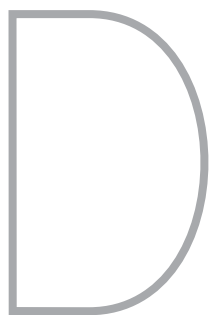
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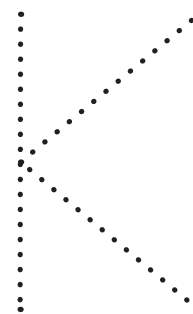
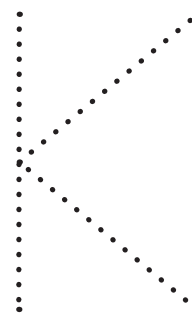
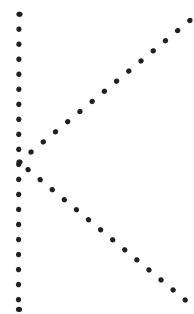
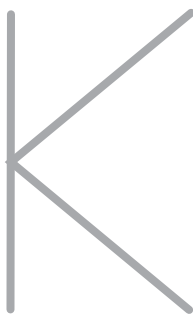
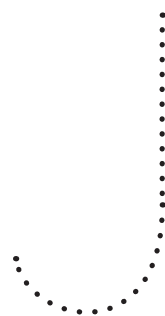
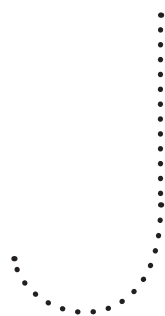
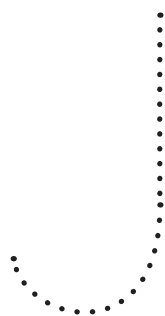
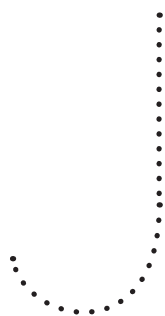
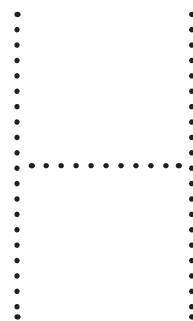
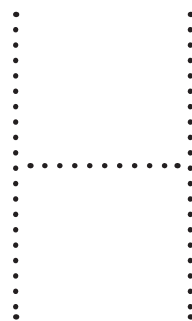
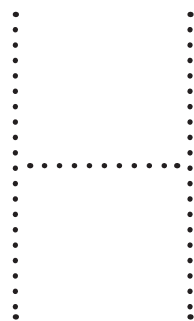
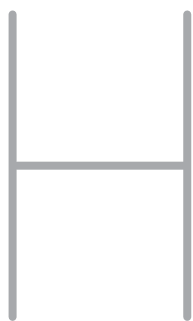
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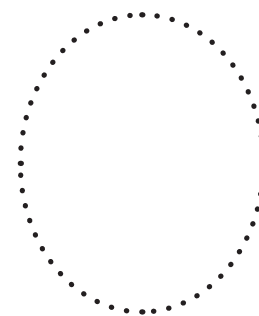
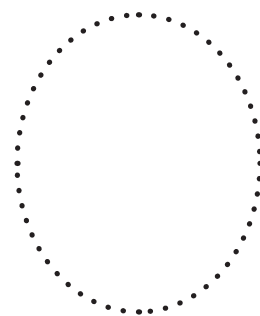
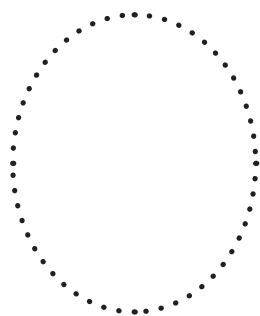
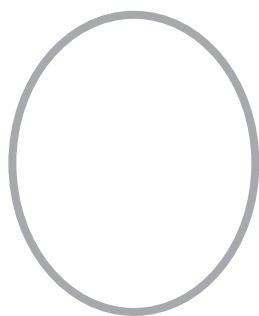
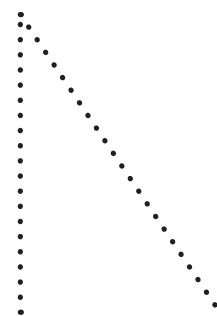
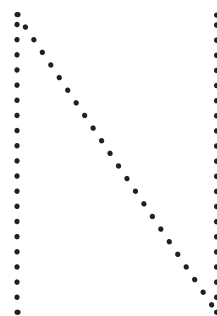
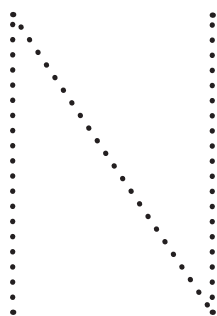
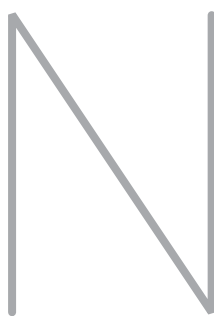
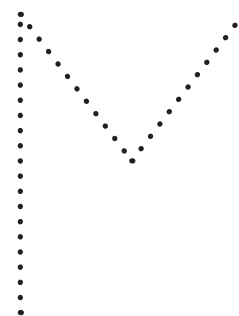
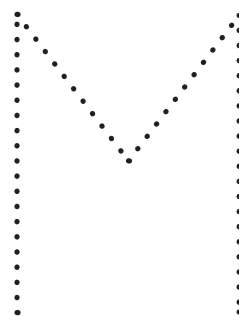
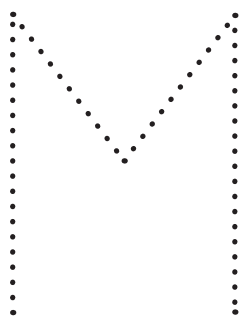
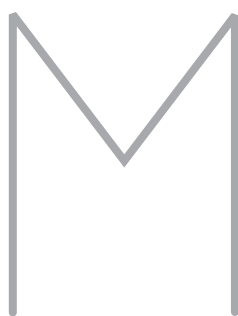
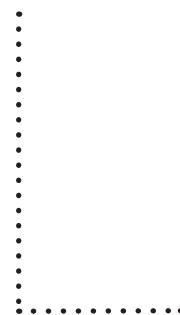
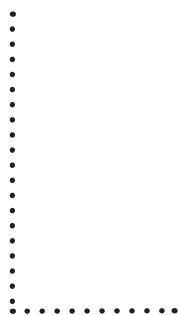
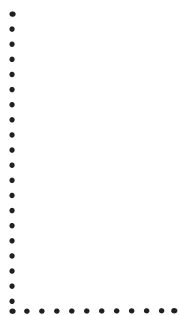
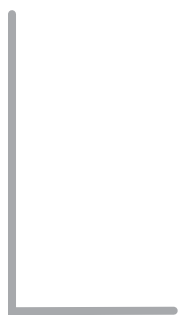
Sledi pikicam in riši črke.



Sledi pikicam in riši črke.



Sledi pikicam in riši črke.



Sledi pikicam in riši črke.

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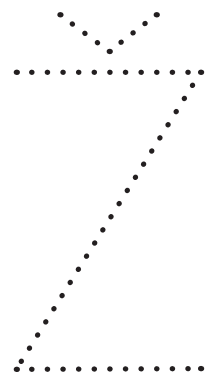
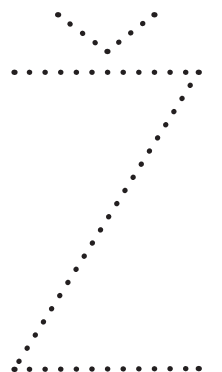
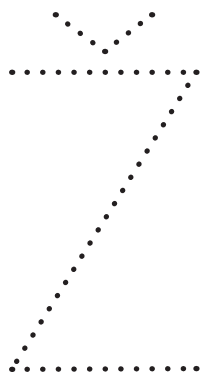
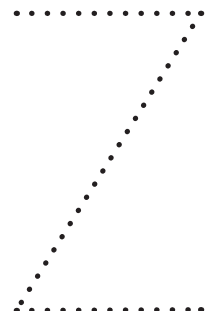
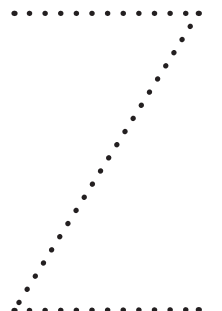
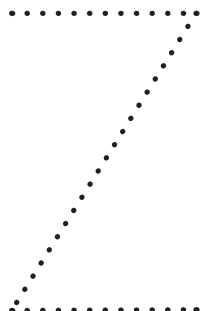
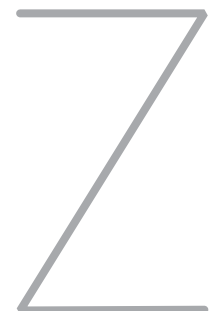
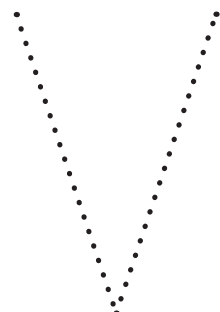
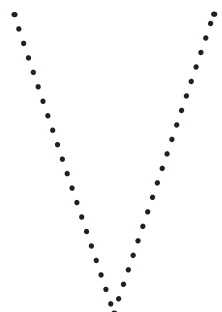
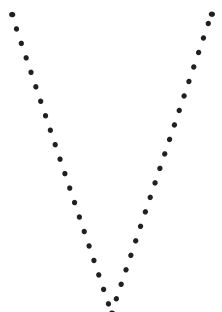
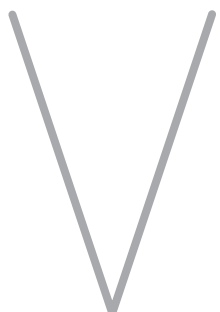
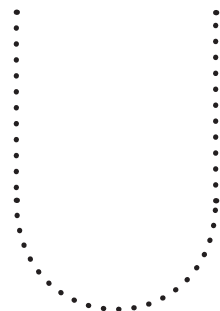
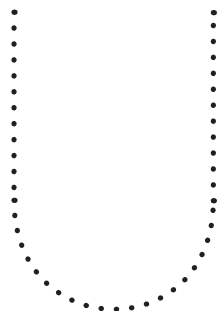
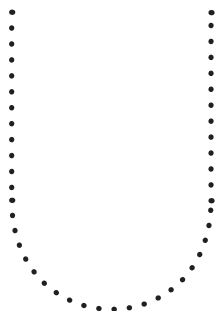
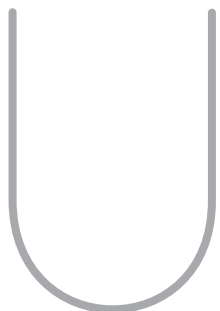
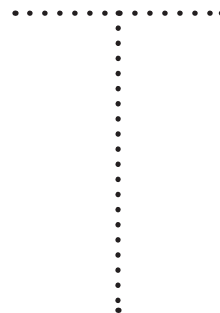
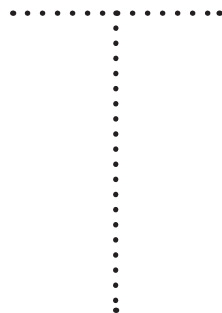
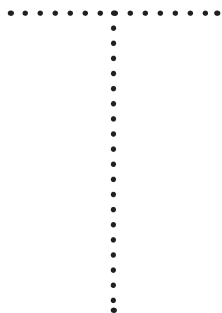
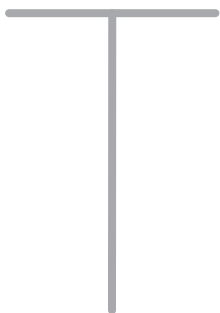
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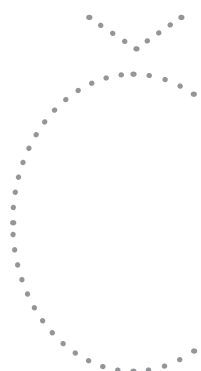
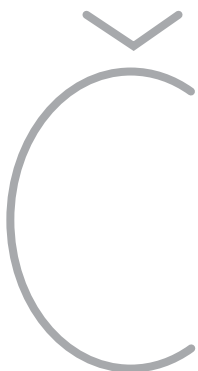
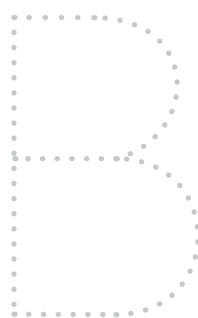
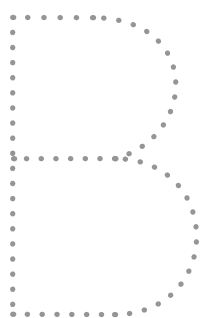
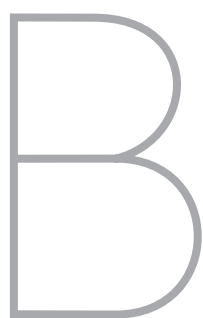
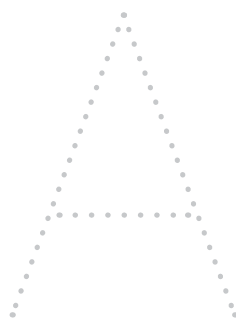
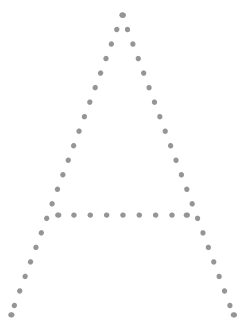
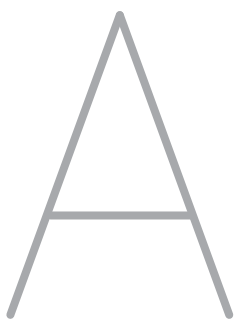
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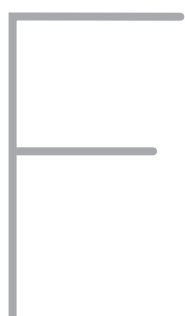
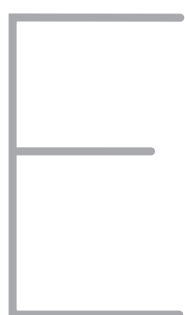
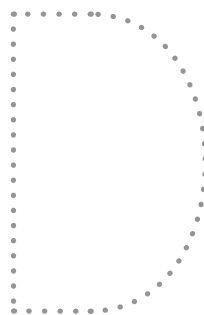
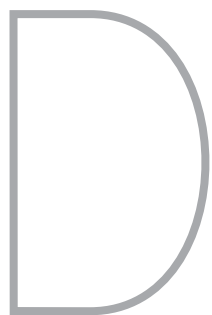
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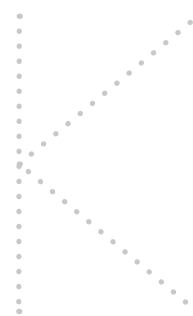
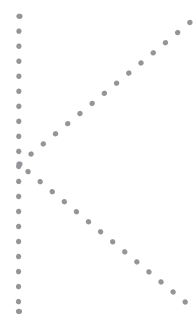
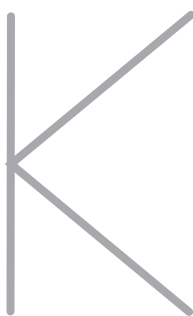
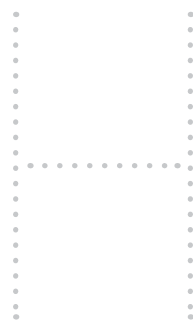
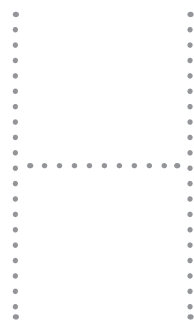
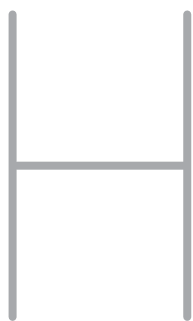
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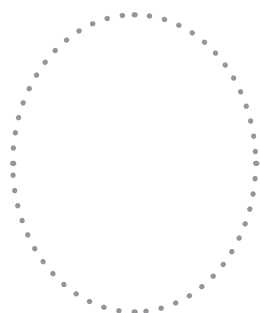
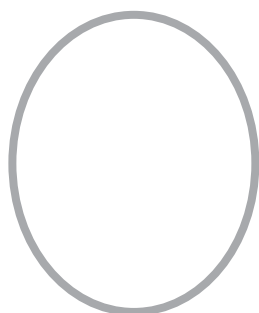
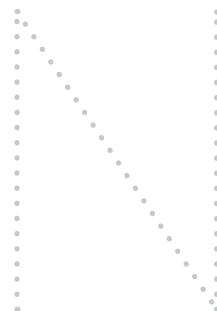
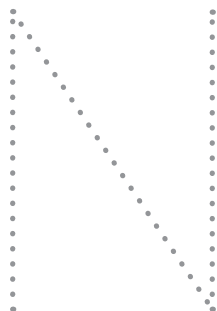
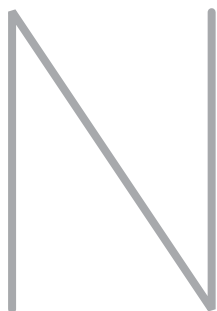
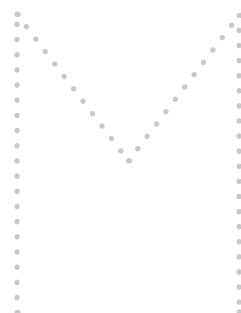
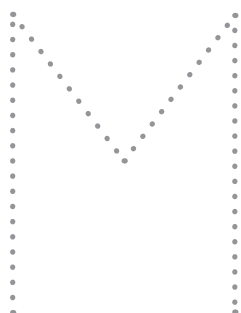
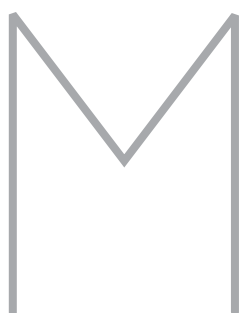
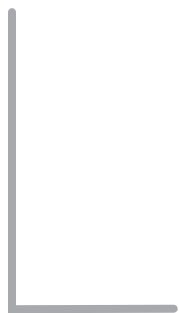
Sledi pikicam in riši črke.



Sledi pikicam in riši črke.



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Sledi pikicam in riši črke.

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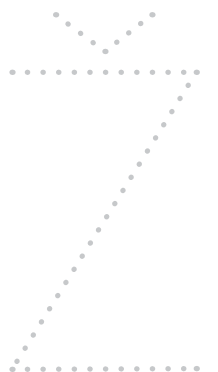
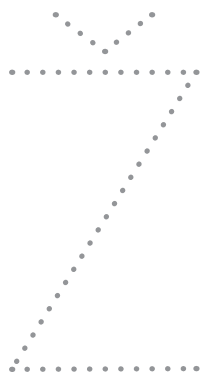
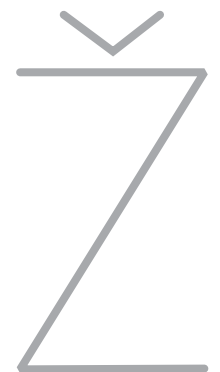
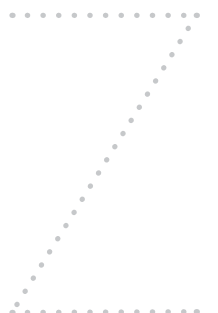
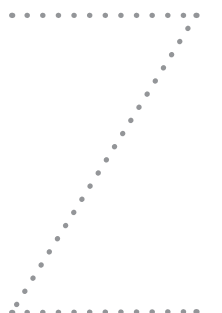
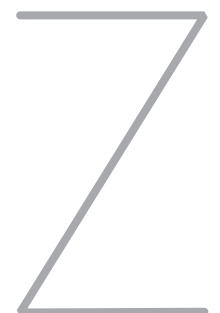
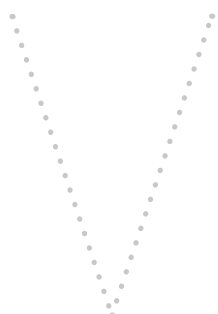
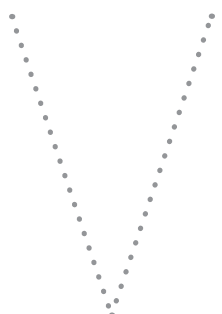
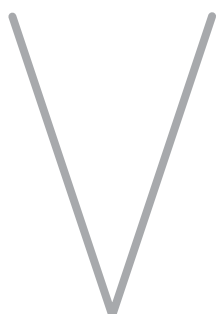
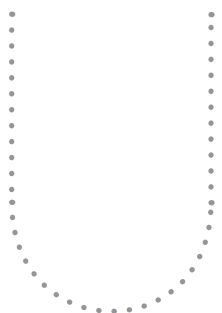
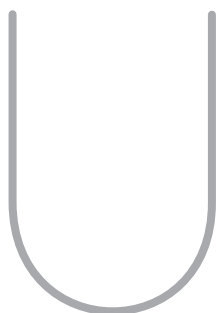
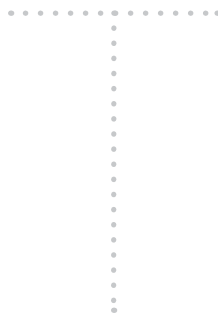
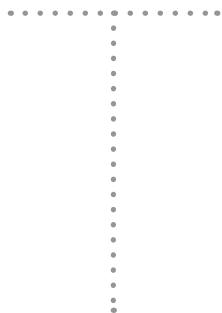
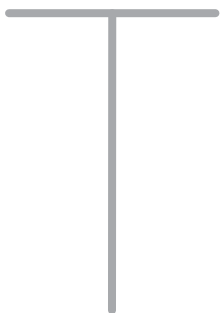
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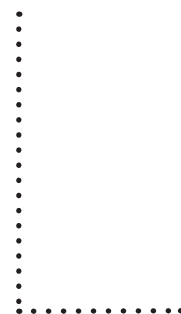
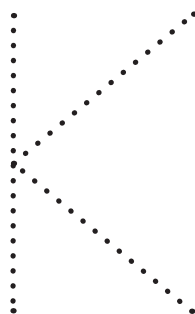
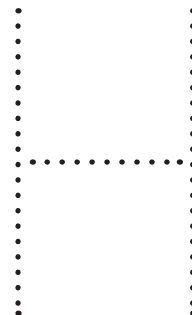
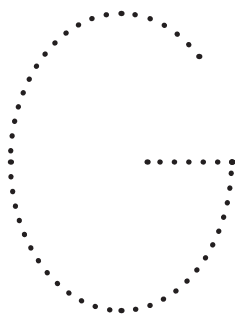
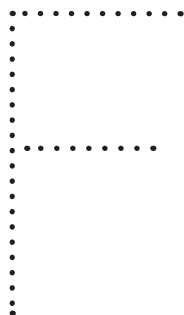
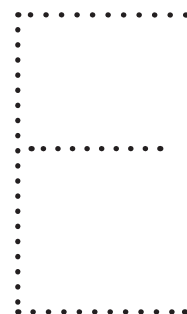
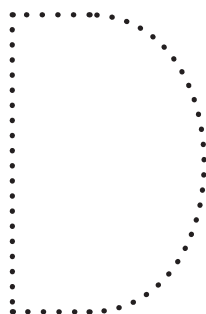
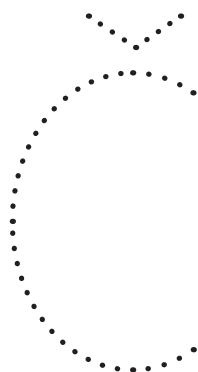
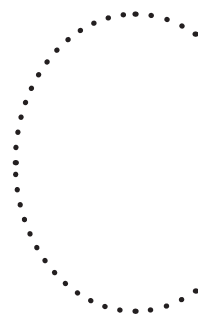
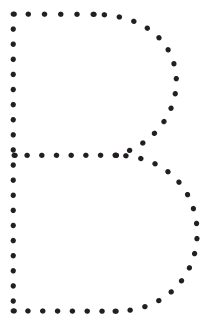
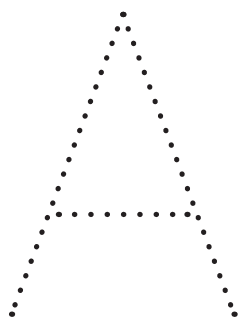
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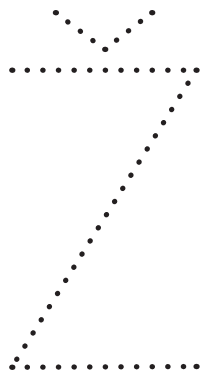
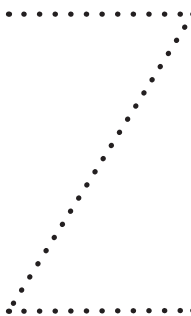
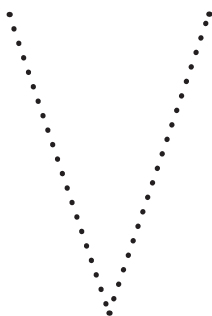
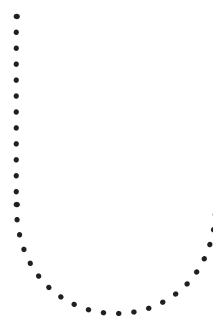
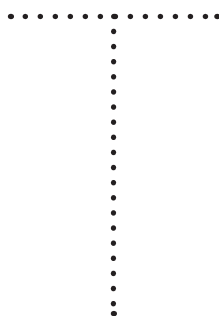
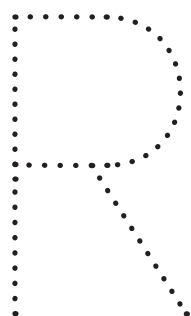
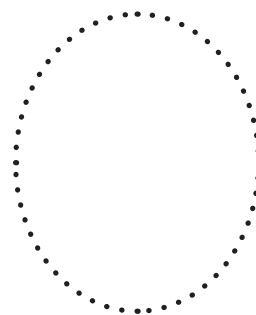
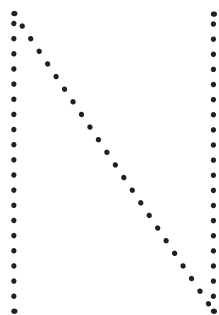
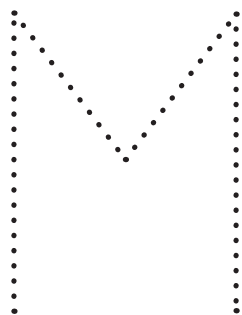
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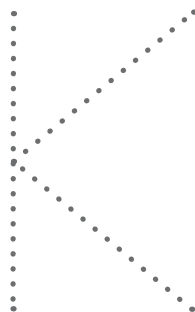
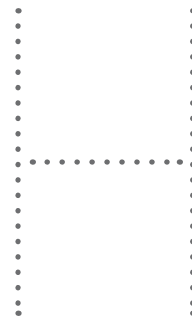
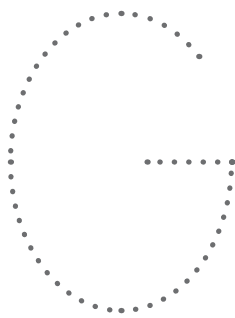
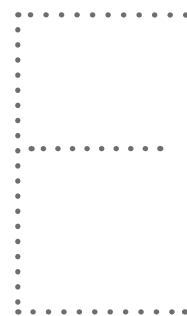
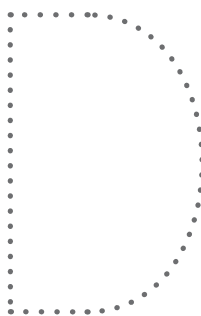
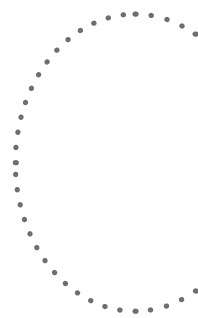
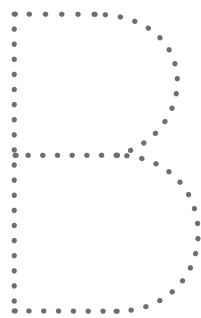
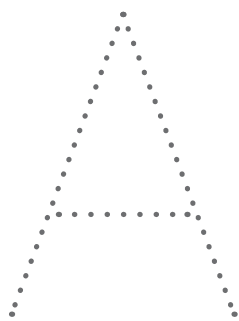
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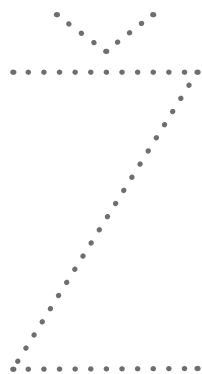
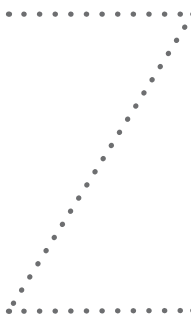
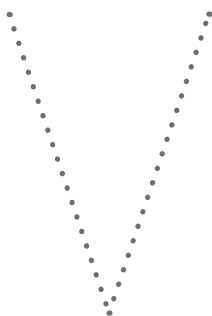
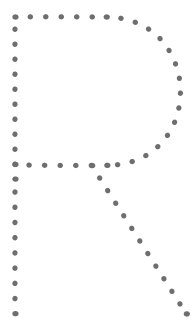
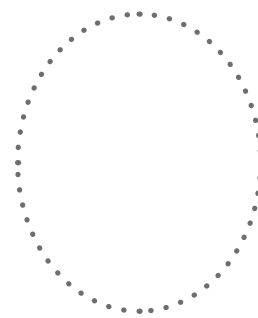
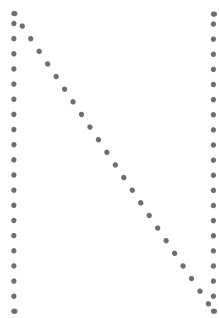
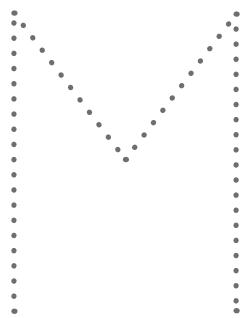
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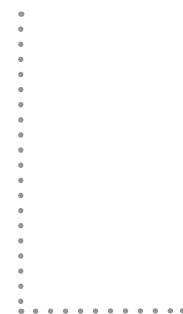
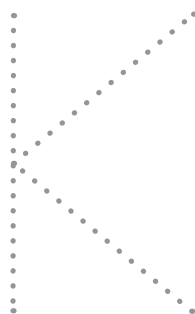
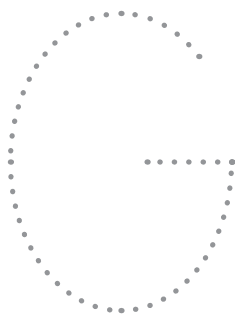
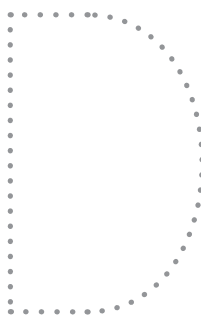
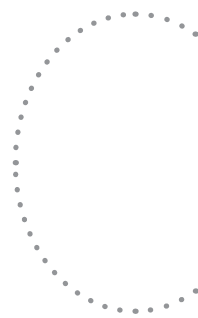
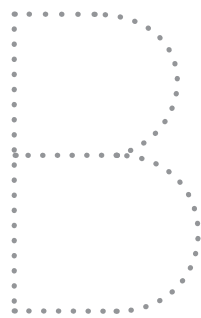
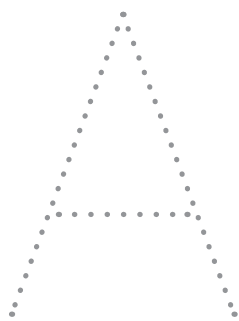
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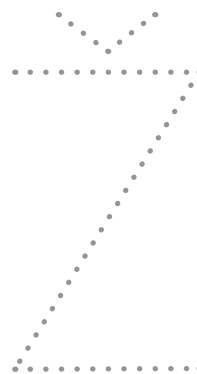
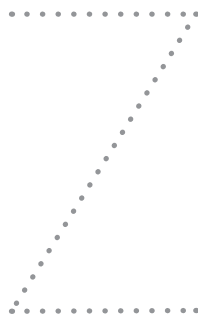
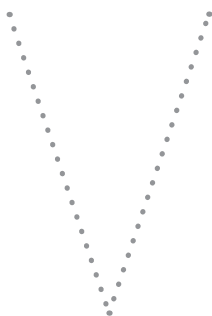
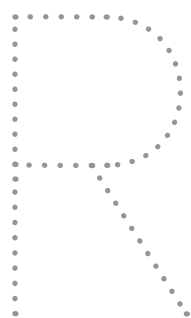
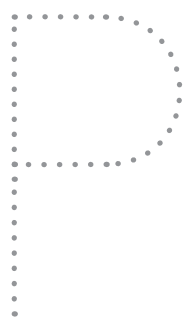
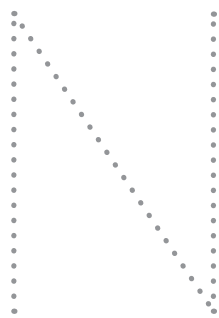
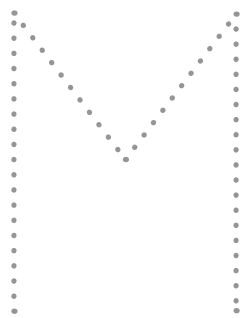
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