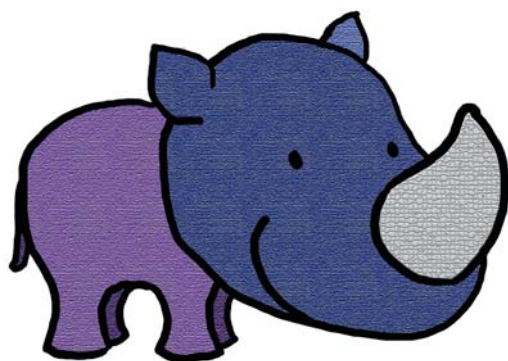


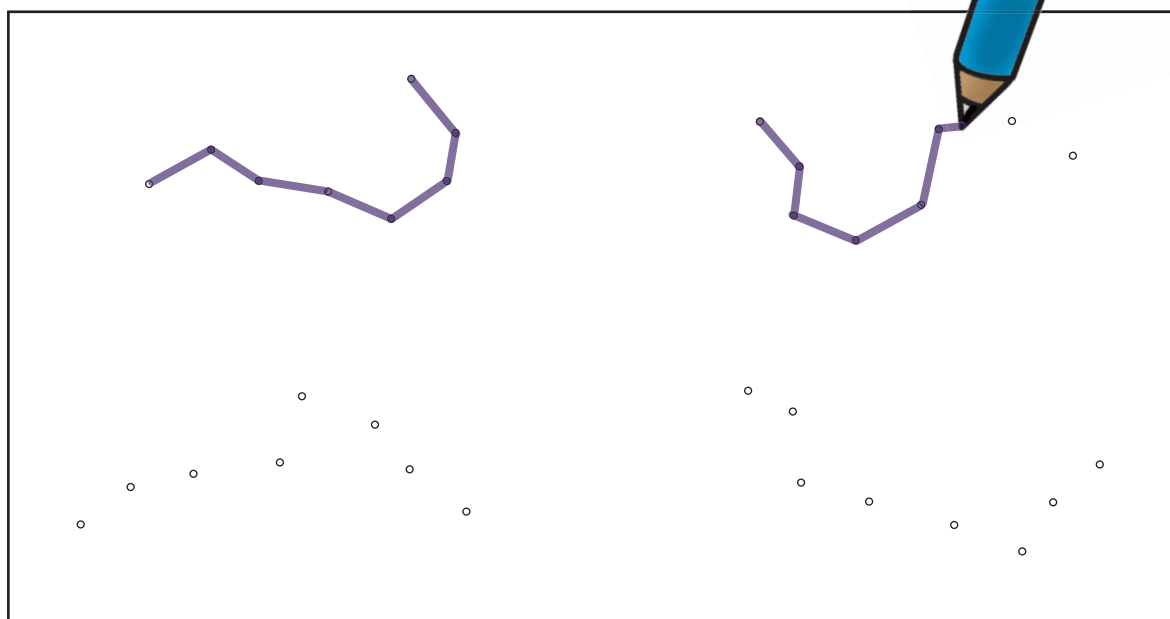
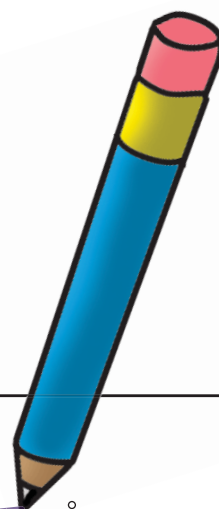
dr. Kristijan Musek Lešnik

dr. Petra Lešnik Musek

PROSTORSKA UREJENOST: POVEZOVANJE PIK - ČRTE



POVEŽI PIKE Z
RAVNIMI ČRTAMI.



PROSTORSKA UREJENOST: POVEZOVANJE PIK - ČRTE

dr. Kristijan Musek Lešnik

dr. Petra Lešnik Musek

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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, pa tudi s poznejšimi dosežki ter ucnim uspehom, ali neuspehom.

Nekatere raziskave kažejo, da mnogi učenci prav zaradi slabše razvitih drobno gibalnih spretnosti dosegajo slabše rezultate, kot bi jih pričakovali glede na njihove intelektualne zmožnosti.

Druge raziskave opozarjajo, da ustrezno strukturirani programi v predšolski in v šolski dobi vodijo k izboljšanju vidno prostorskih in drobno gibalnih spretnosti ter posledično k boljšim dosežkom.

Zato je še kako pomembno, da pri predšolskih in šolskih otrocih sistematično spodbujamo in krepimo razvoj drobno gibalnih spretnosti in grafomotorike.

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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 specifiinimi 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 ustrezno 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 drobno motoričnih, 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 tipkovic 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.

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*).



Roka je prav tako pomembna kot so pomembni naši možgani.

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 in 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.



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 predpisalnih 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.



POVEZOVANJE PIK

O povezovanju pik

Povezovanje pik je pomembna aktivnost pri spodbujanju koordinacije oko - roka, pri kateri otrok riše ravne črte od ene do druge pike v nizu. Ko med risanjem otrok s pogledom sproti sledi napredujoči črti in njeno smer primerja s ciljno piko, se krepi nadzor nad drobnimi gibi roke s katerimi nadzira premikanje pisala od pike do pike in se krepi se vizualno motorična integracija.

Povezovanje pik je pomembno za utrjevanje prostorskih pojmov, ki igrajo pomembno vlogo pri razvoju pisanja, risanja in drugih grafomotoričnih ter drobno gibalnih spretnosti. Naloge, pri katerih otrok med risanjem išče najkrajše razdalje med posameznimi pikami, krepijo vidno razlikovanje (vizualno diskriminacijo), spreminjajoča se smer risanja črt pa prispeva k razvoju zaznavanja drobnih gibov in kinestetičnega zavedanja.

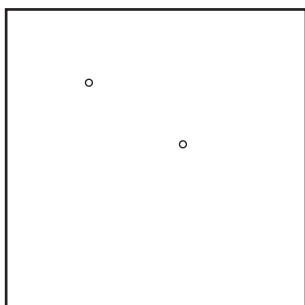
Med risanjem naj otrok ne spreminja položaja lista in naj ga ne obrača. Če je le mogoče, naj poskusi risati posamezen lik v eni potezi, brez ustavljanja ali prestavljanja pisala.

Delovni listi in dejavnosti v tem delovnem zvezku

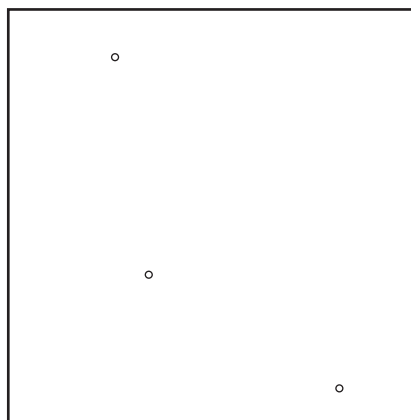
Delovni listi v tem delovnem zvezku od otroka zahtevajo, da poveže niz pik, ki ležijo znotraj omejenega prostora. Naloge si sledijo od najlažjih do težavnejših, pri čemer se težavnost stopnjuje na tri načine:

- z naraščanjem števila pik v nizu (od dveh pik naprej),
- z naraščanjem razdalje med posameznimi pikami v nizu,
- s stopnjevanjem kotov med posameznimi črtami, ki jih mora otrok narisati med pikami.

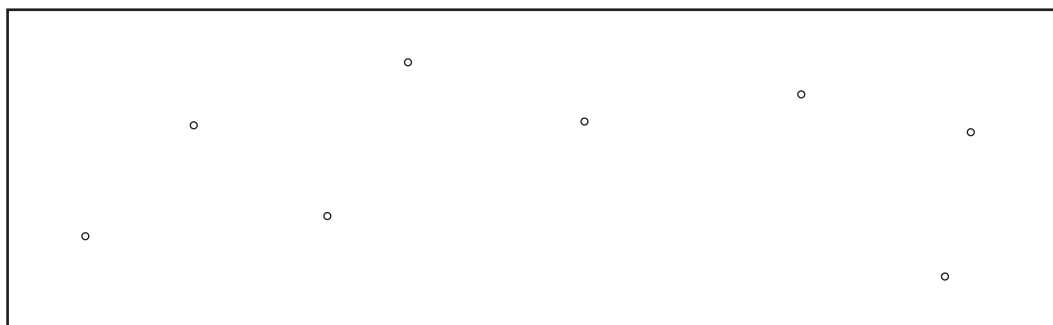
Primer: dve piki, manjša razdalja



Primer: tri pike, večja razdalja


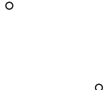






Primer: niz pik, spreminjajoči se koti med črtami









DELOVNI LISTI












Poveži pike z ravnimi črtami.







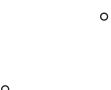





Poveži pike z ravnimi črtami.













Poveži pike z ravnimi črtami.













Poveži pike z ravnimi črtami.

















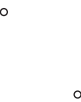







Poveži pike z ravnimi črtami.










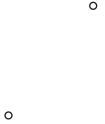





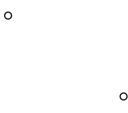








Poveži pike z ravnimi črtami.
























Poveži pike z ravnimi črtami.



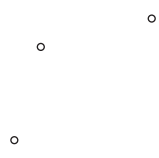


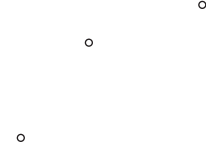
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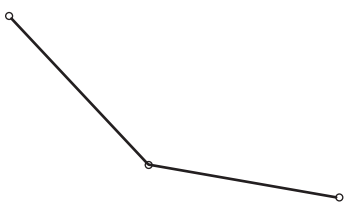

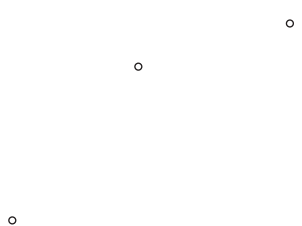


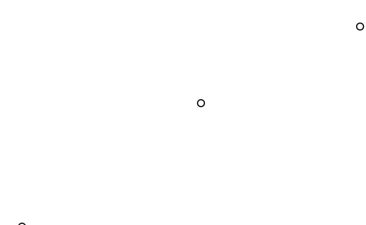
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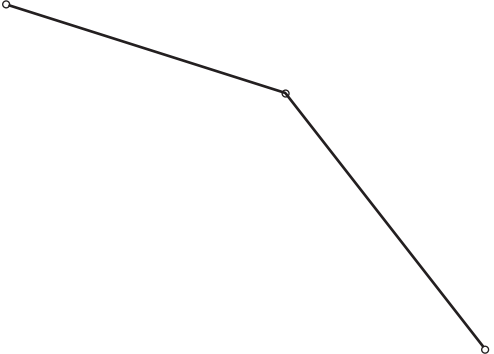



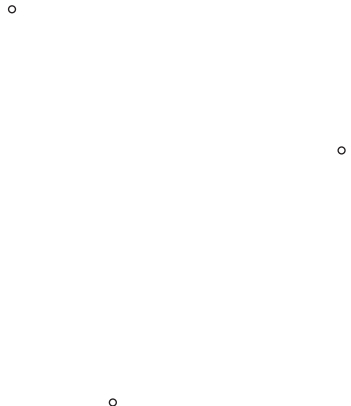
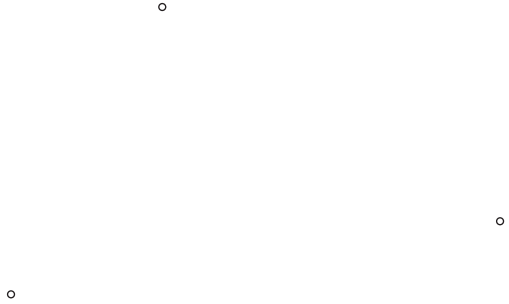
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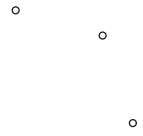








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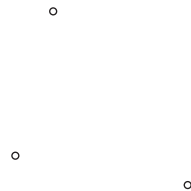
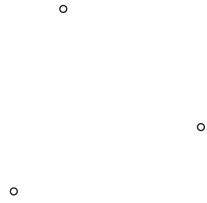


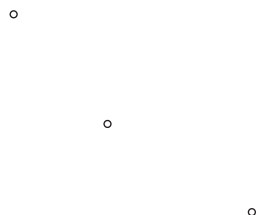
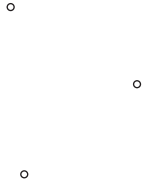
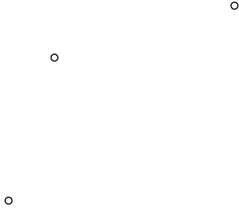


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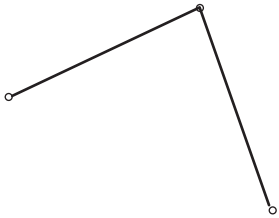


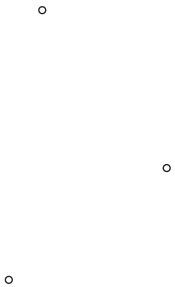
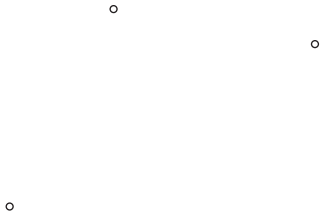
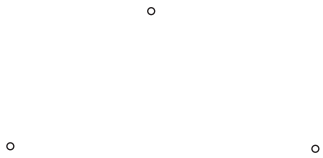
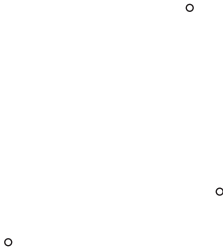
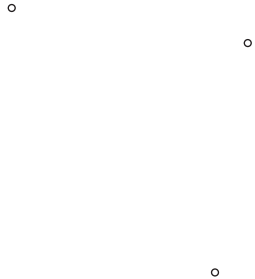
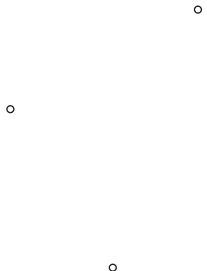
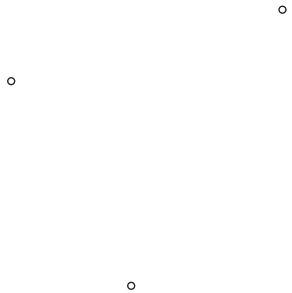
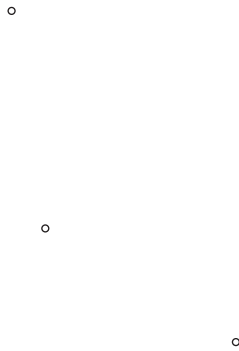

Poveži pike z ravnimi črtami.







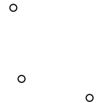

















Poveži pike z ravnimi črtami.












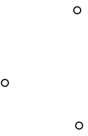






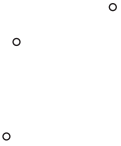
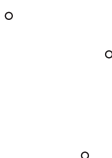
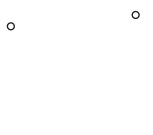


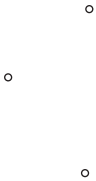
Poveži pike z ravnimi črtami.









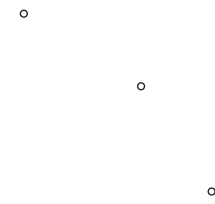


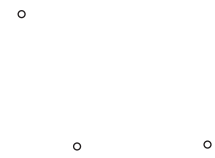

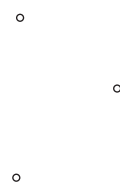





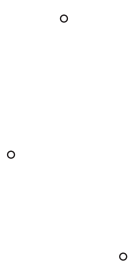
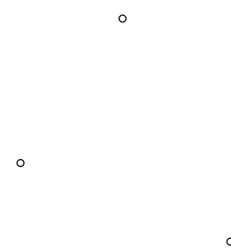

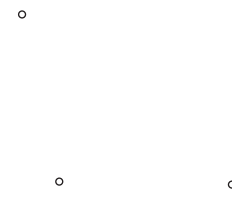
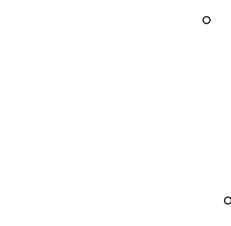
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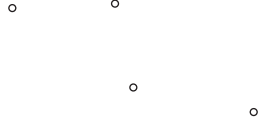
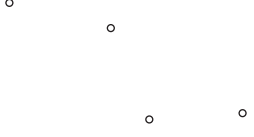
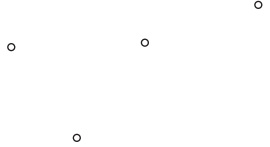
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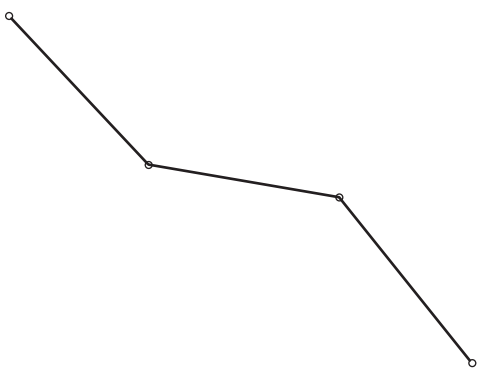
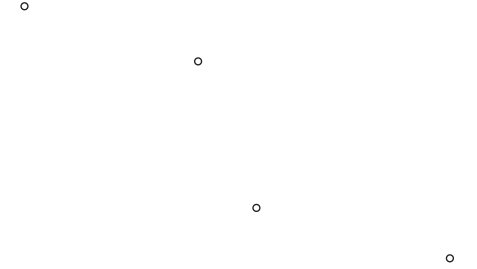
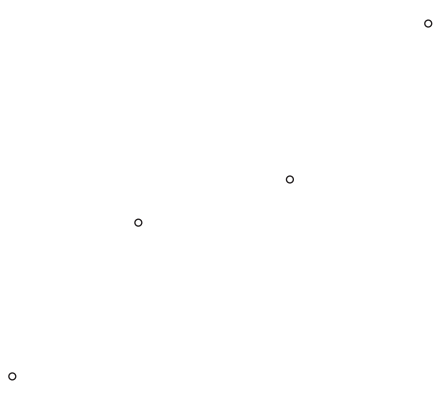


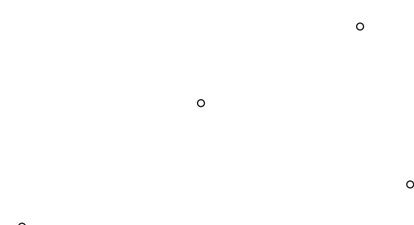
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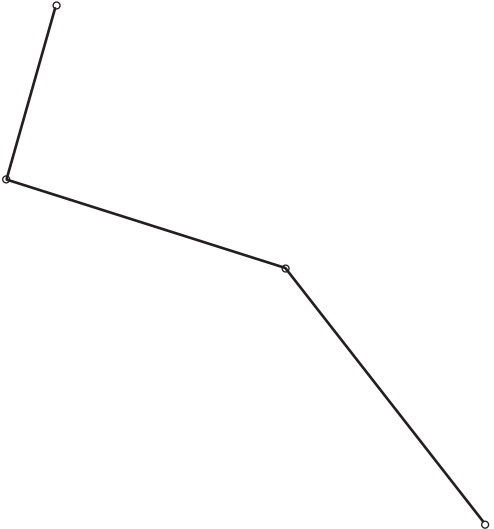

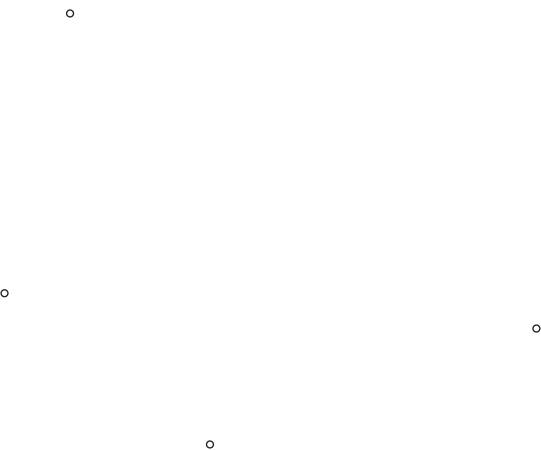

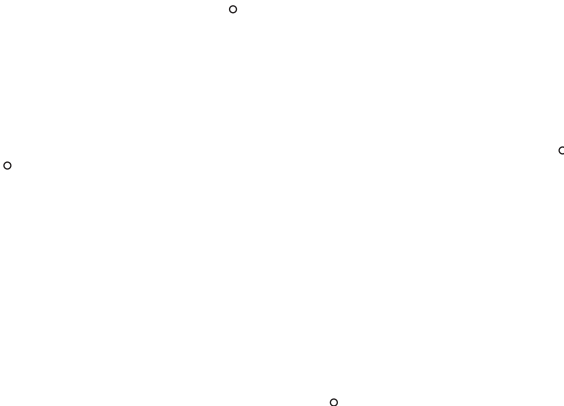
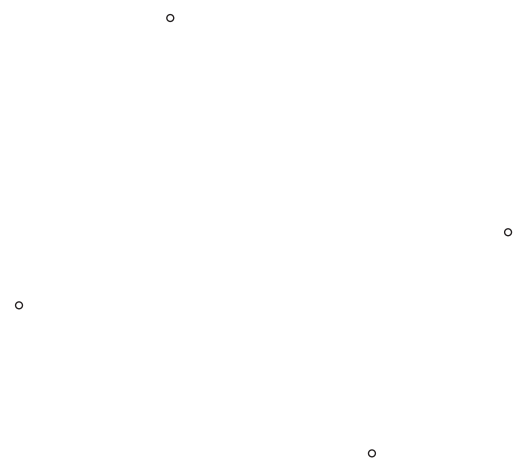
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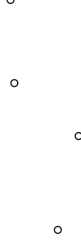

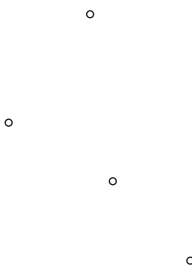


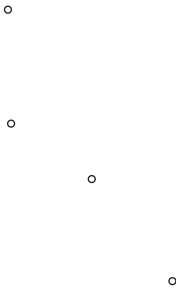

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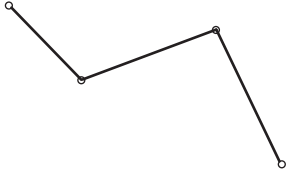
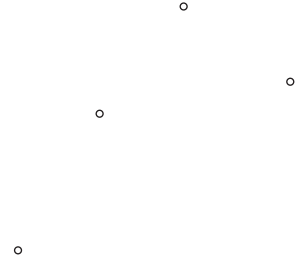
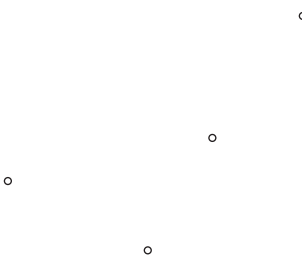
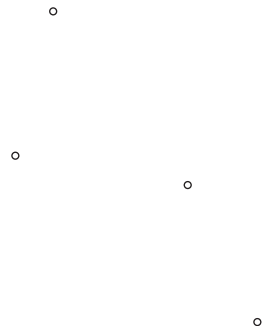

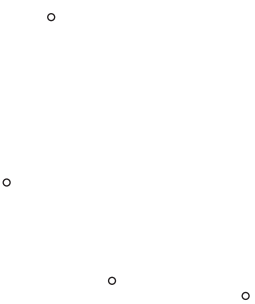

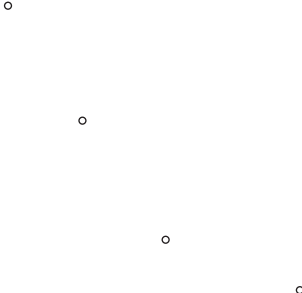
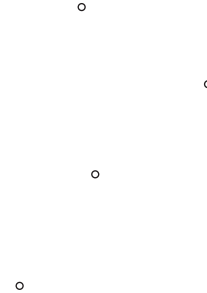
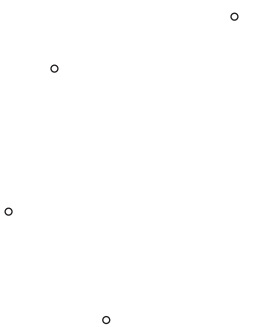
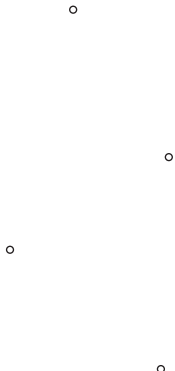
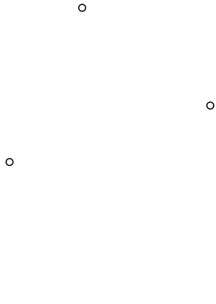
Poveži pike z ravnimi črtami.

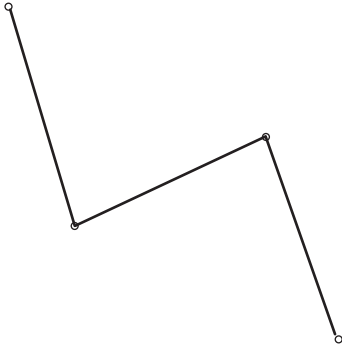
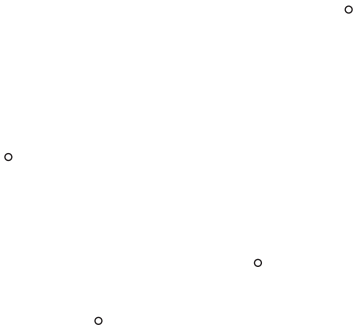
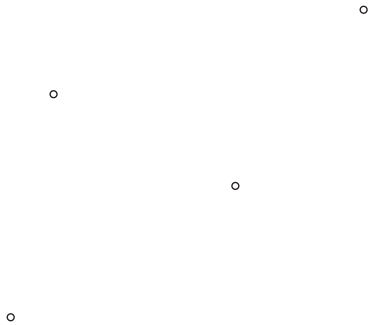
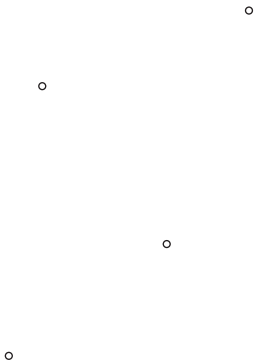


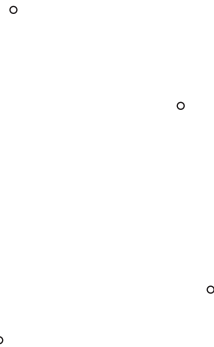
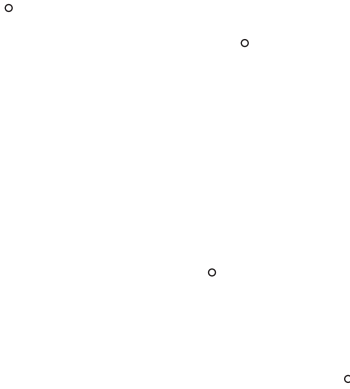

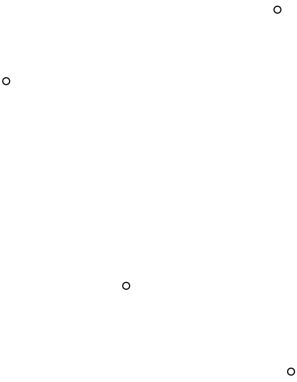

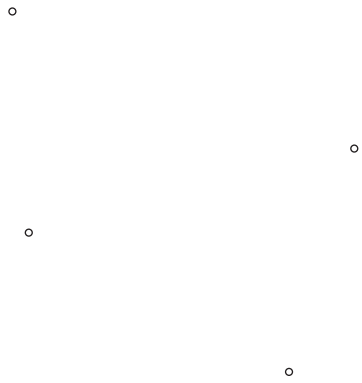
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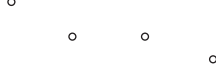

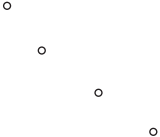
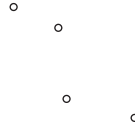

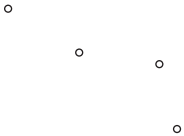
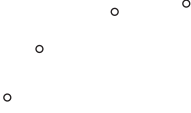




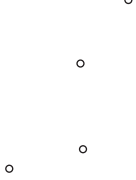

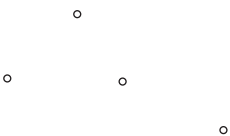


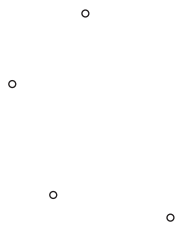
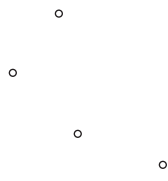

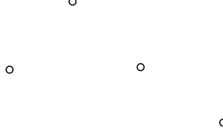
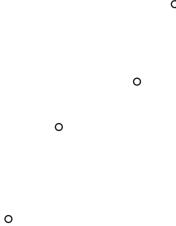
Poveži pike z ravnimi črtami.


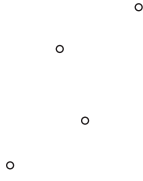
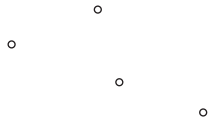


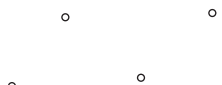





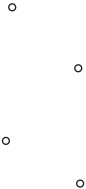

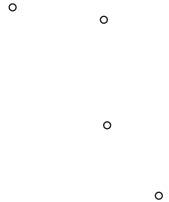
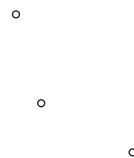

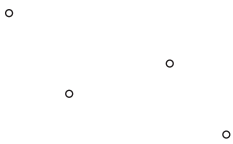

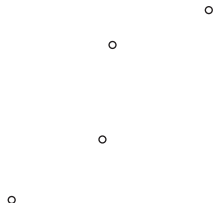
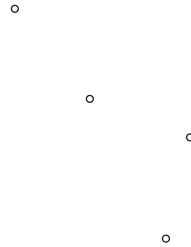
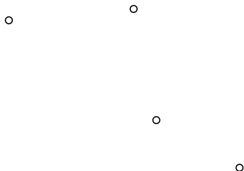


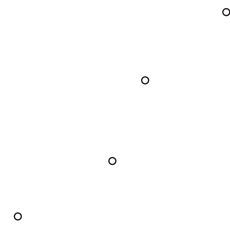
Poveži pike z ravnimi črtami.

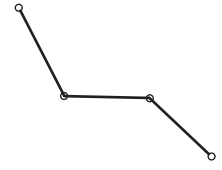
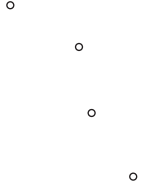

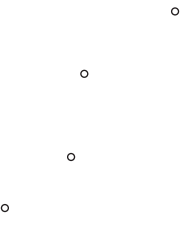
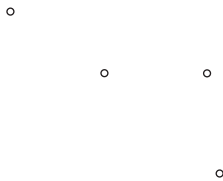
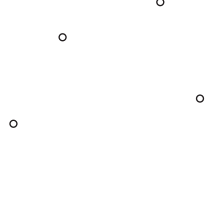
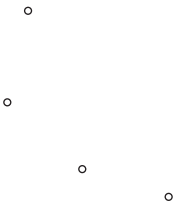
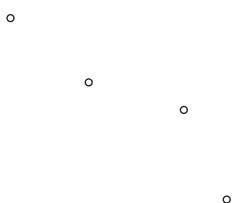
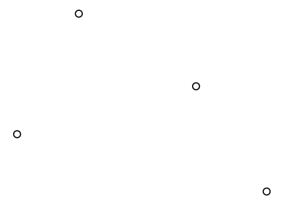
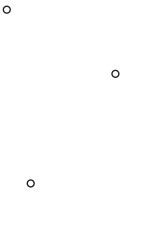
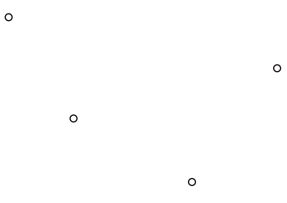
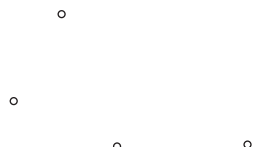
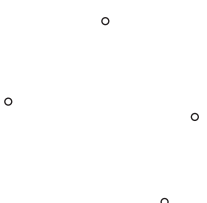
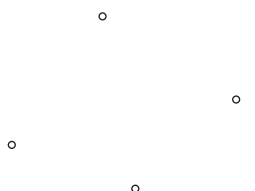

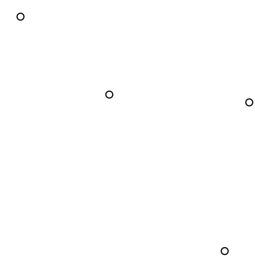
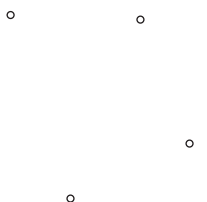
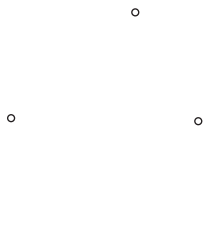

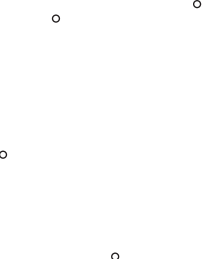
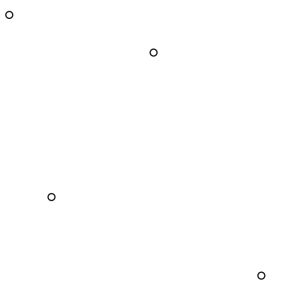

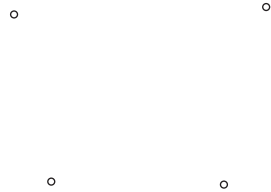
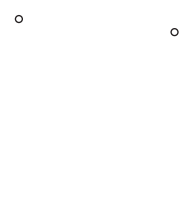
Poveži pike z ravnimi črtami.







Poveži pike z ravnimi črtami.

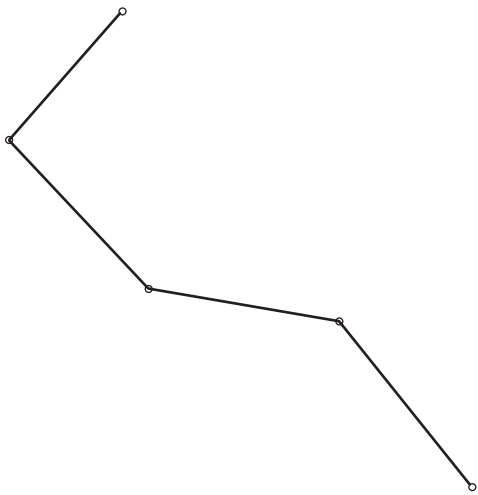
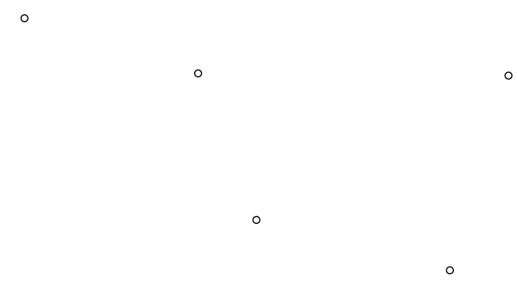
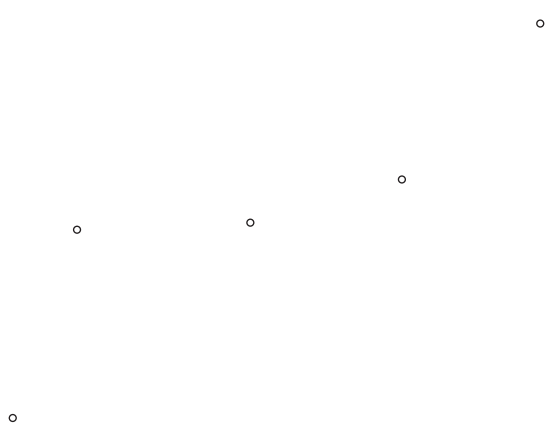
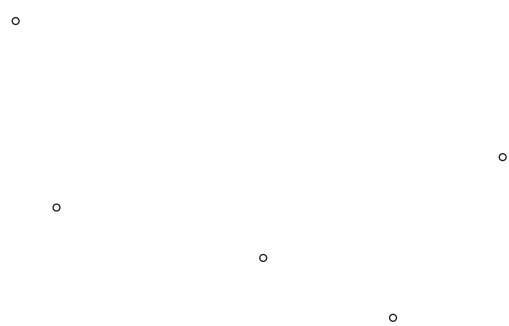
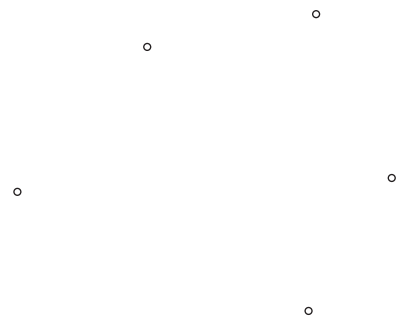
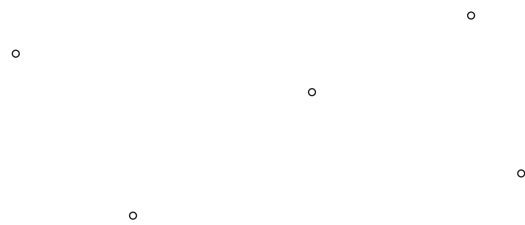
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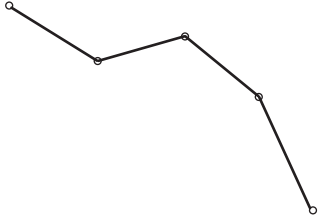
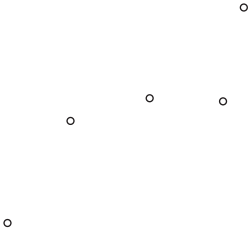

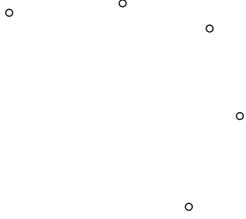
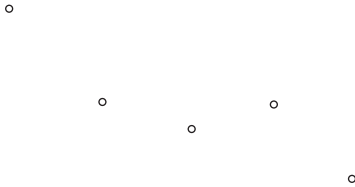


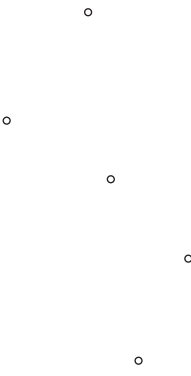
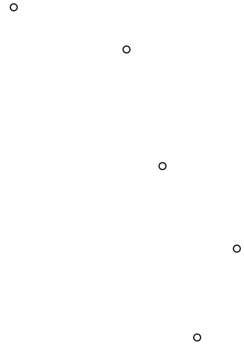
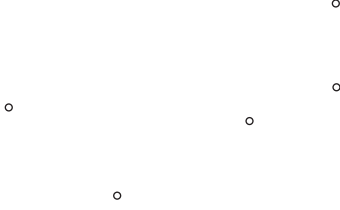
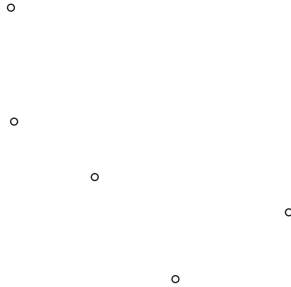
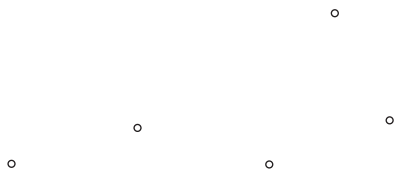
	
	
	

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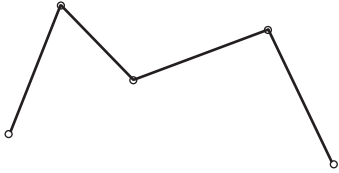
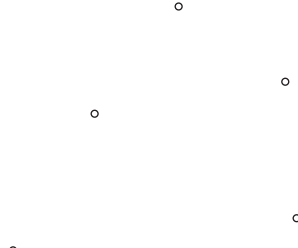
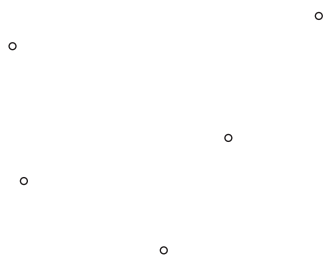
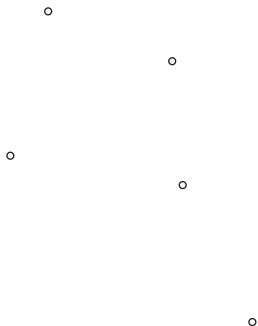
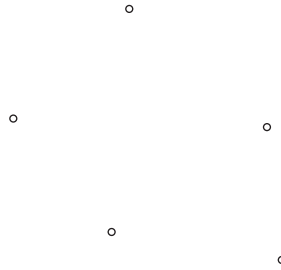

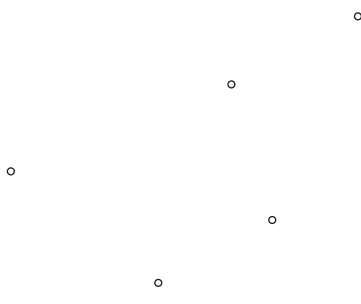
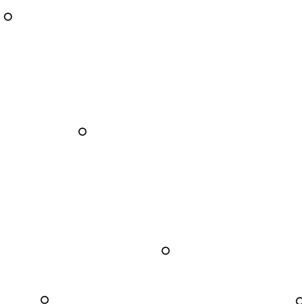
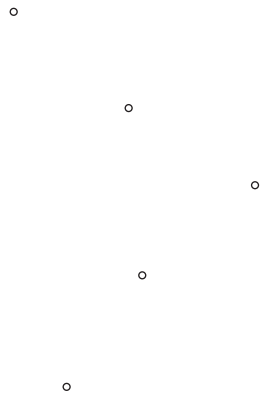

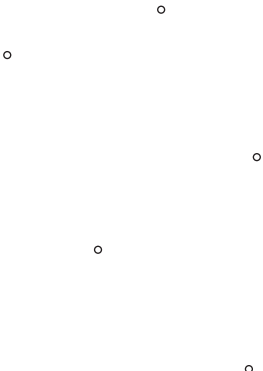
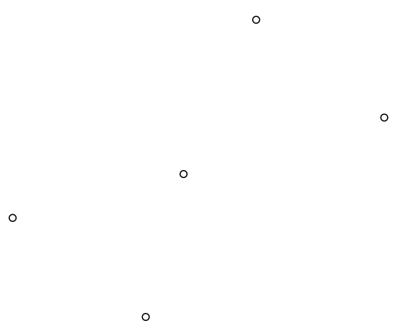
	
	
	

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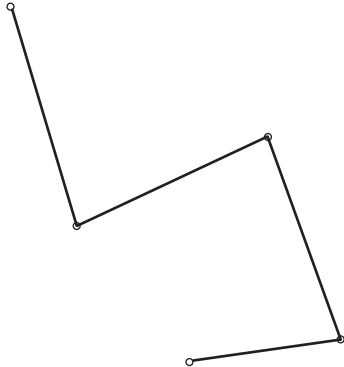
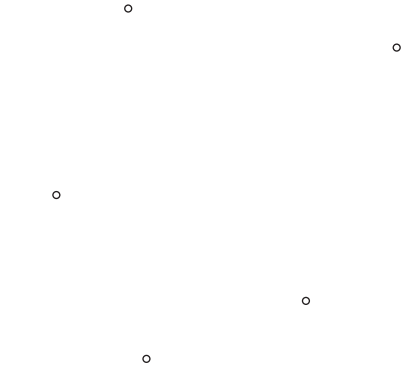
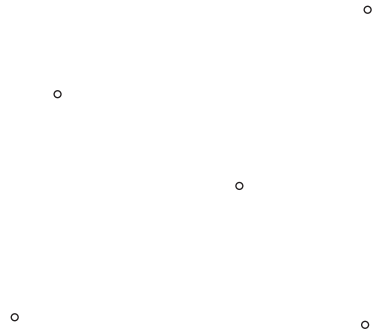
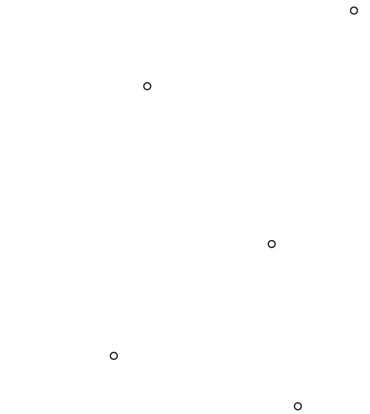
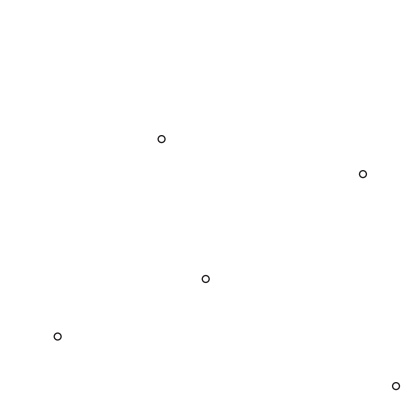
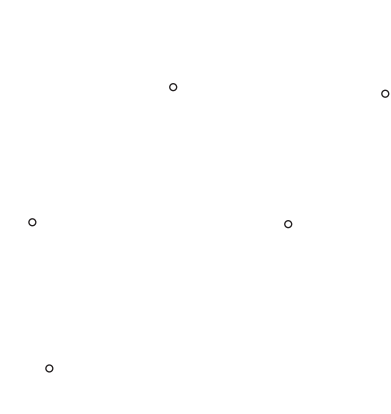
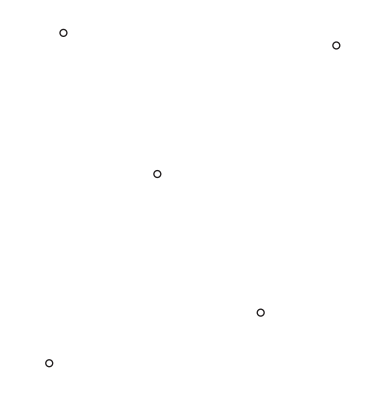
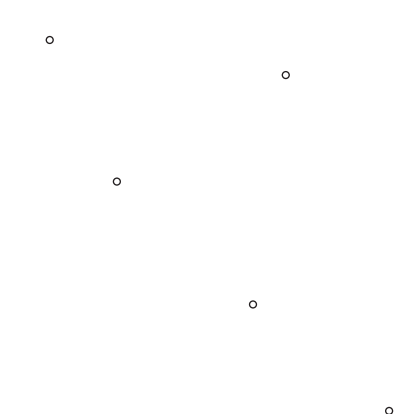
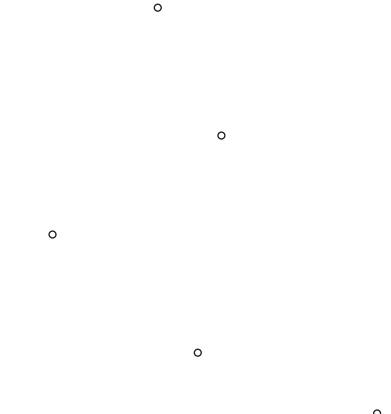
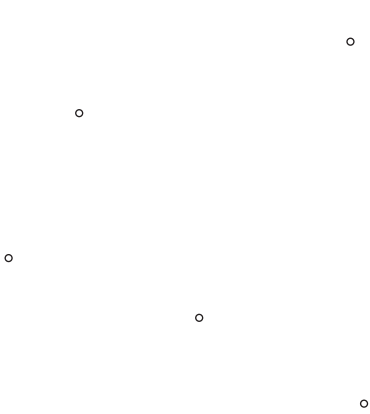
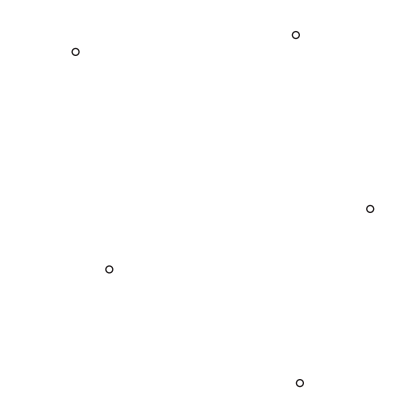
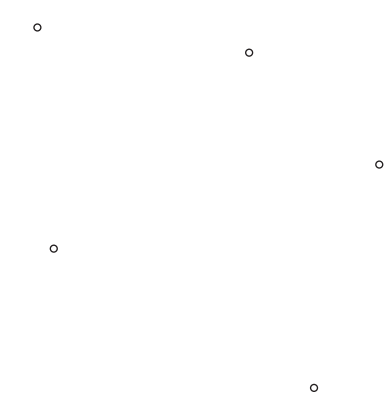
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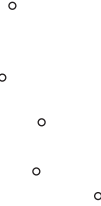


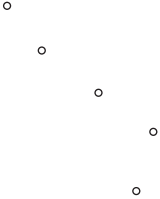
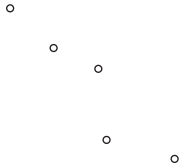

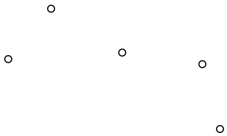
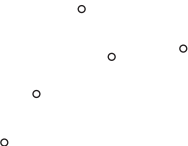
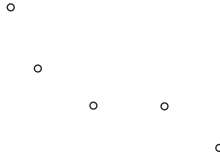




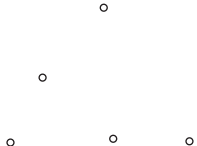
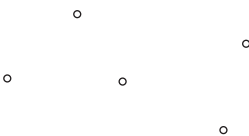

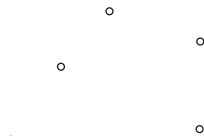
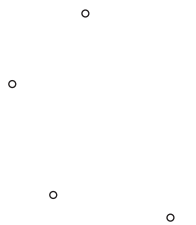
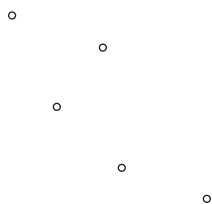

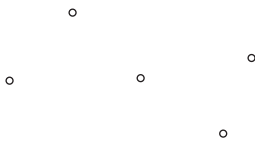
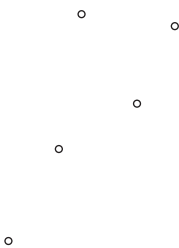
Poveži pike z ravnimi črtami.


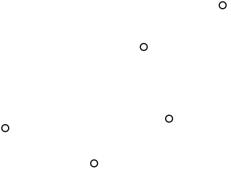
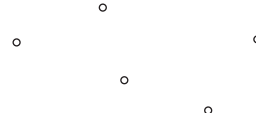
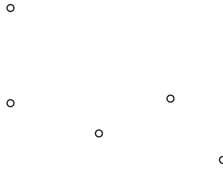



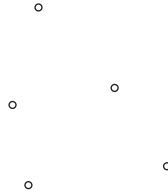
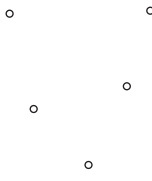
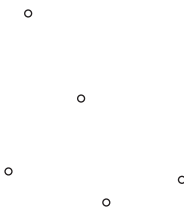

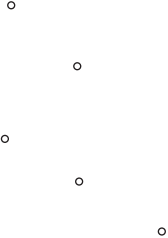
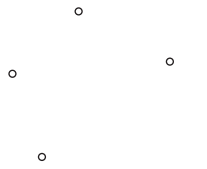
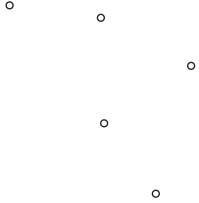
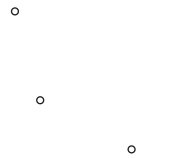
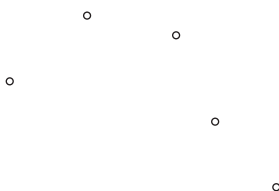
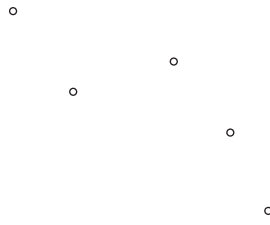
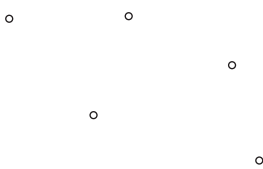
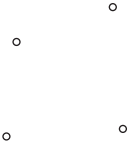
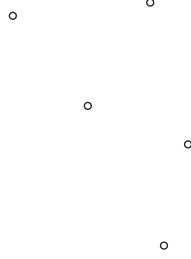
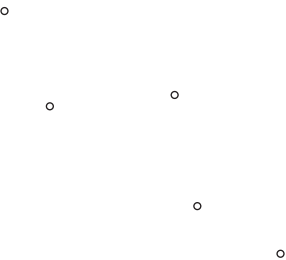
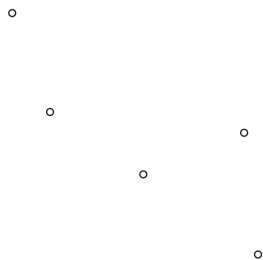
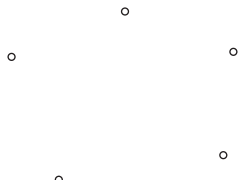
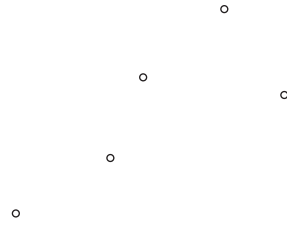
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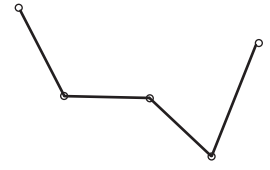
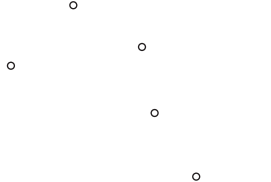
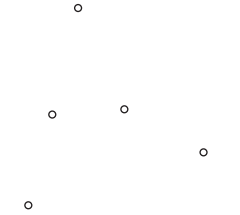
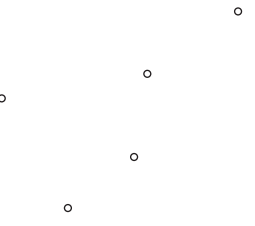

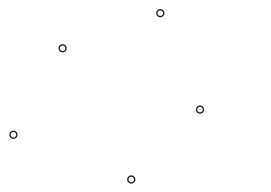
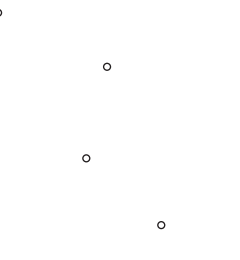
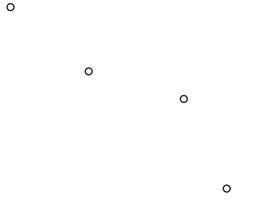
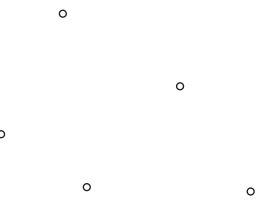
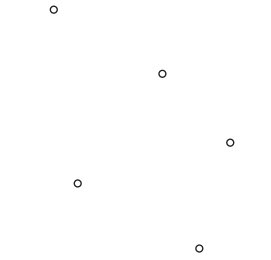
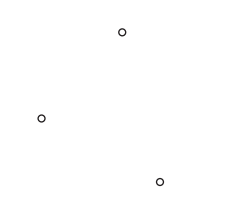
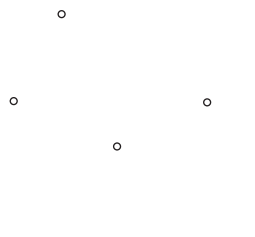
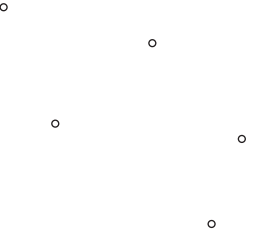
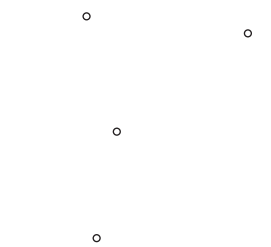
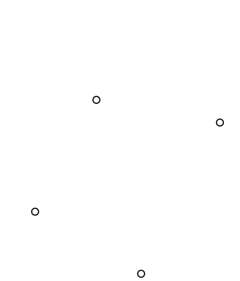
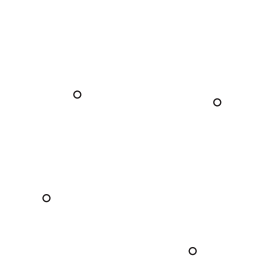
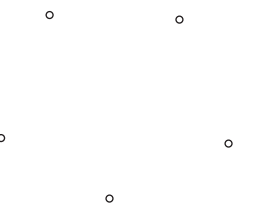
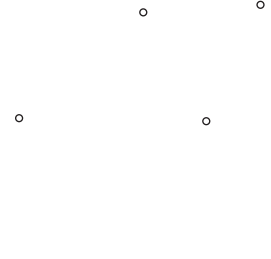
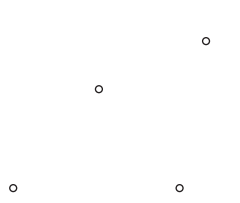
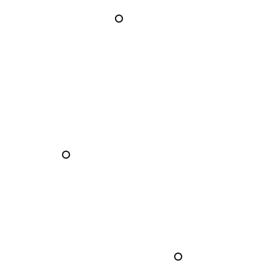
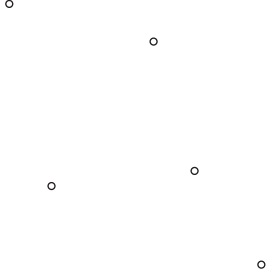
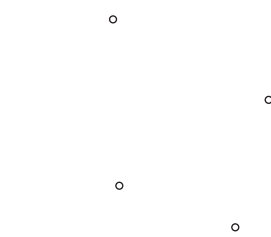
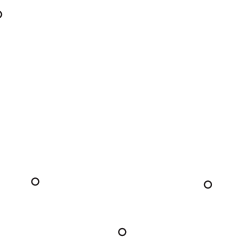
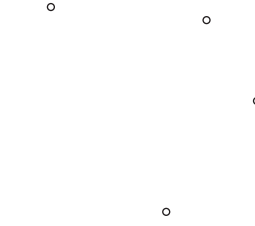
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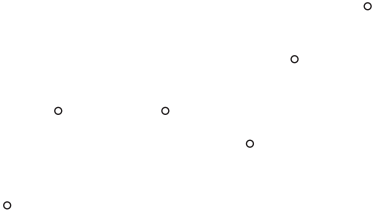
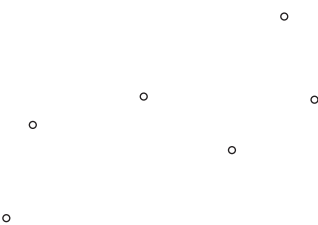
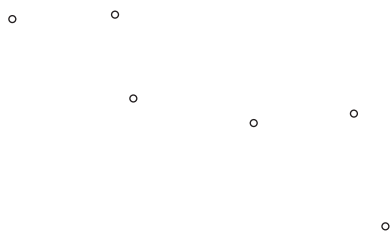

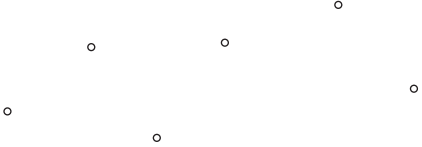
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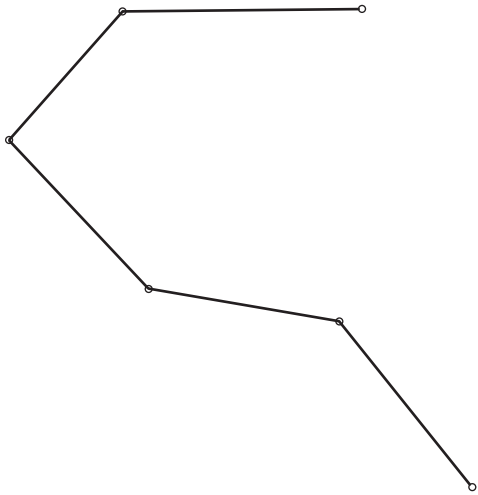
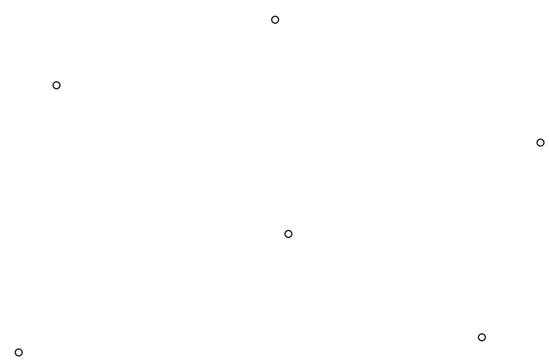
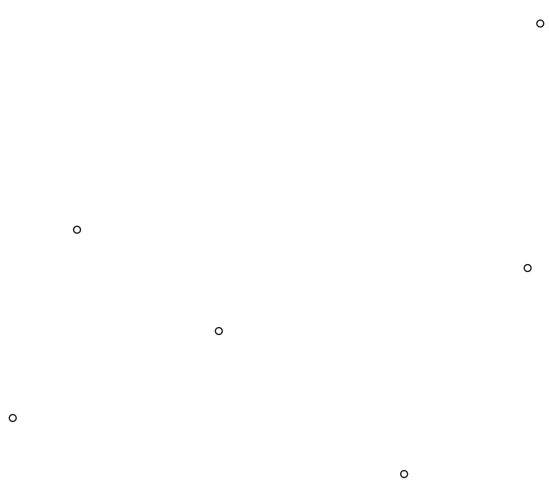
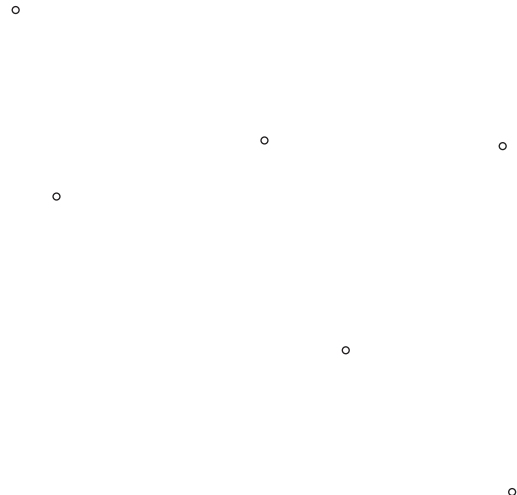
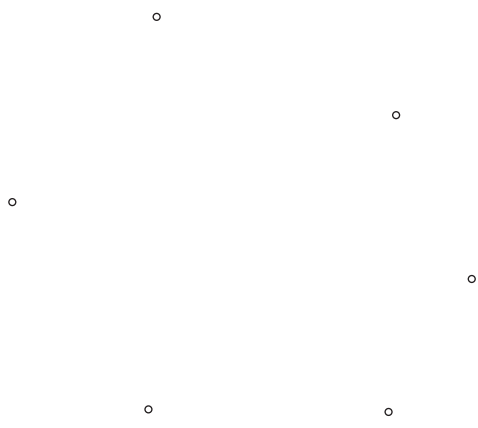
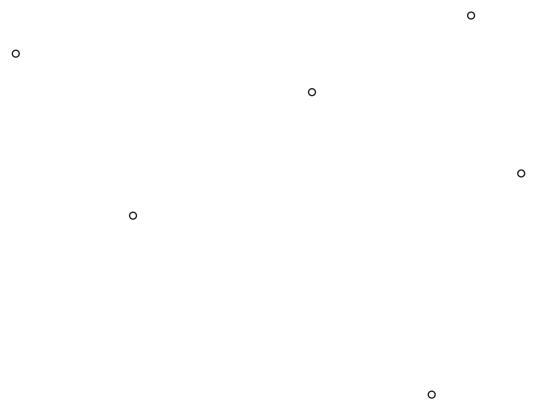
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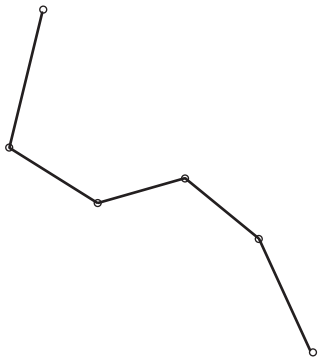
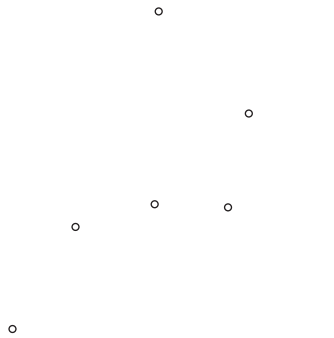
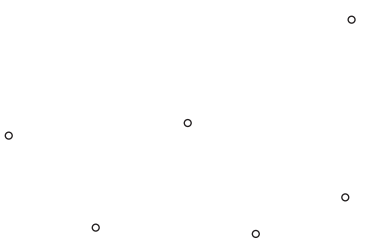
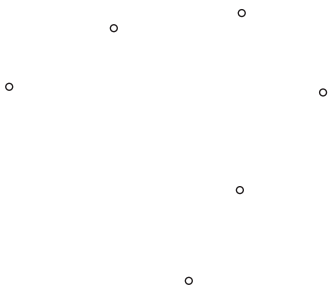
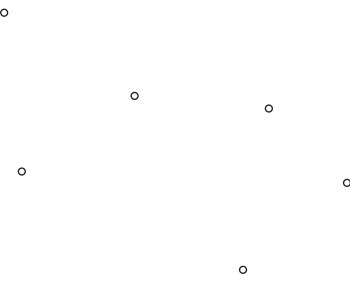
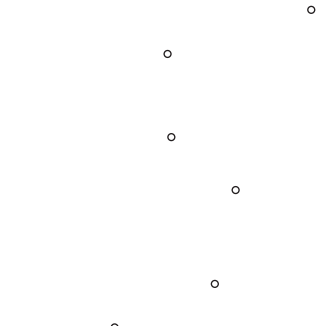
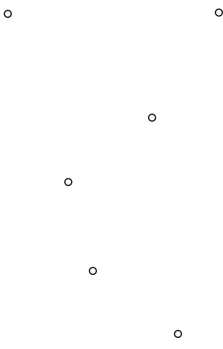
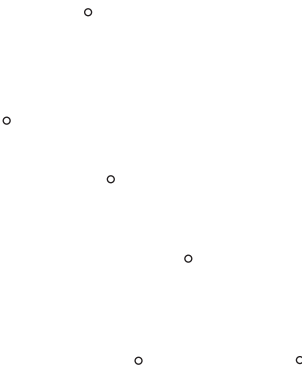
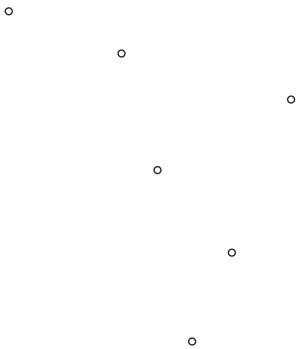
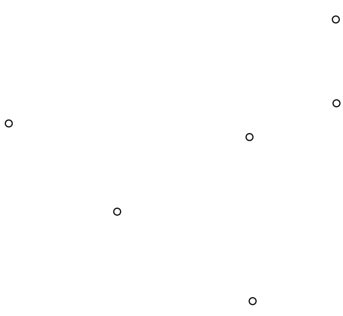
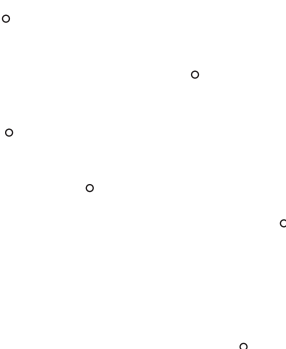
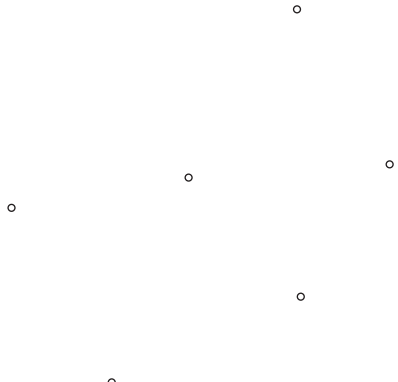
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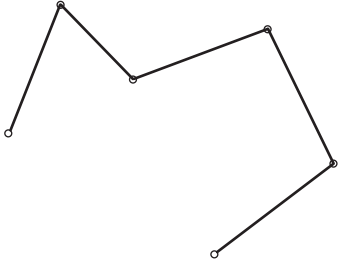
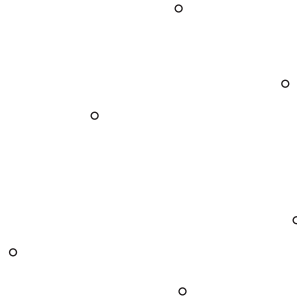
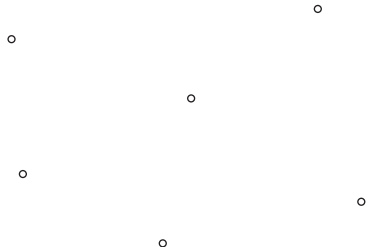
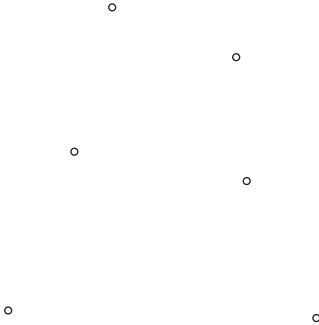
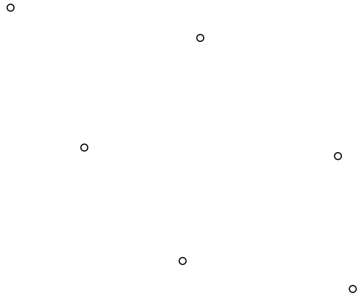
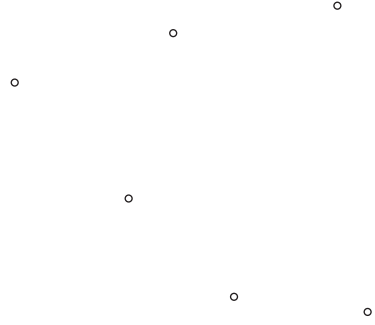

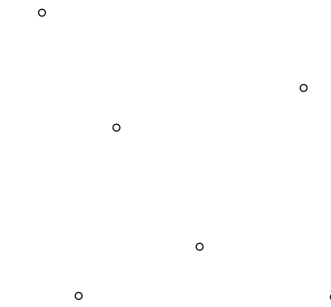
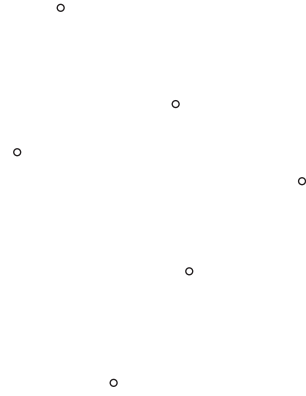
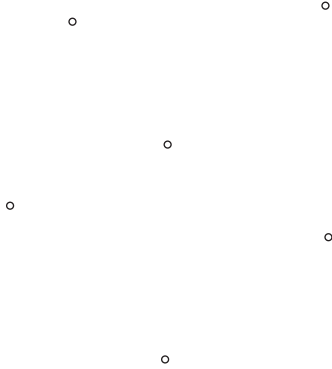
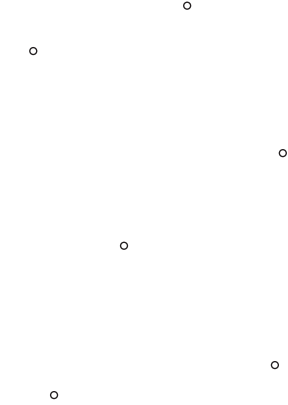
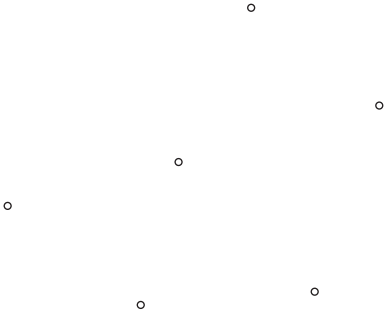
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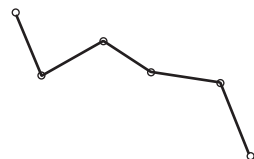


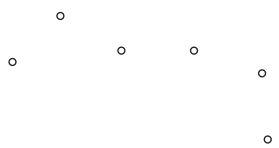

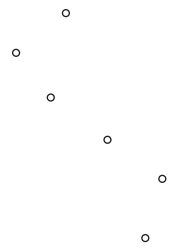
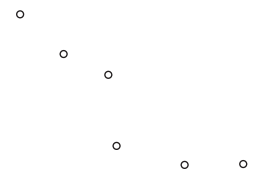
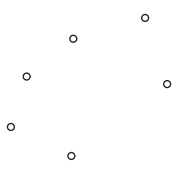
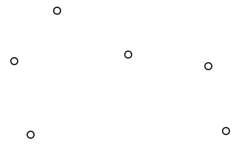
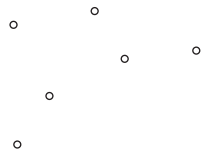
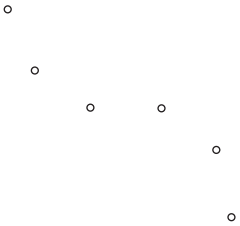
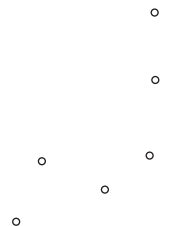

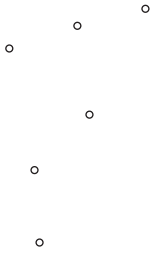
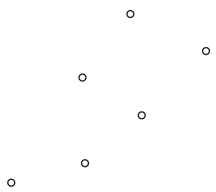
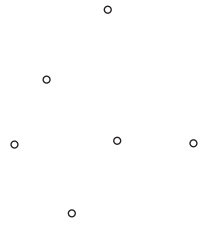
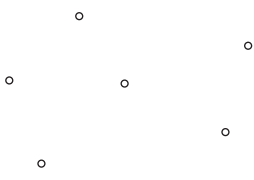
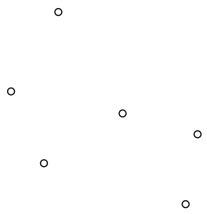
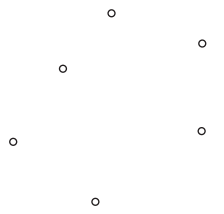
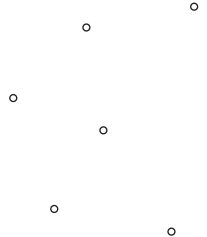
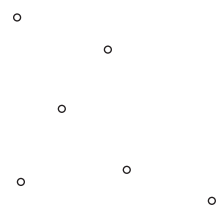


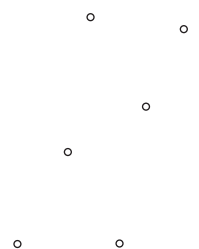
Poveži pike z ravnimi črtami.

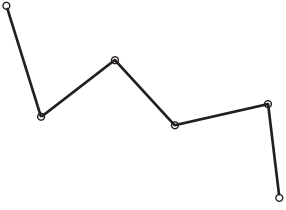

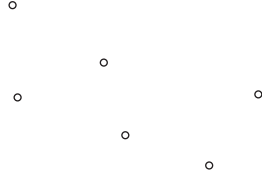
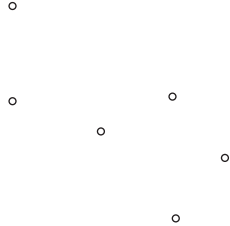
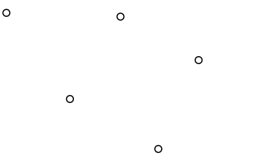
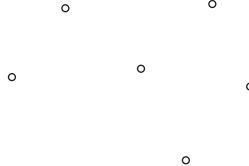

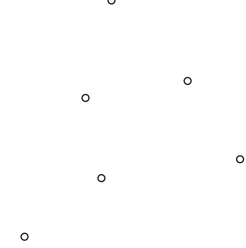
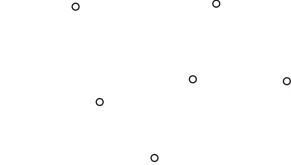
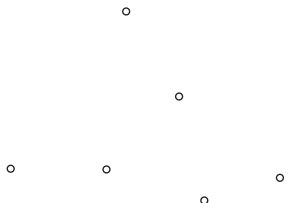
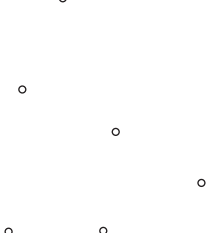
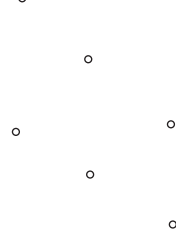
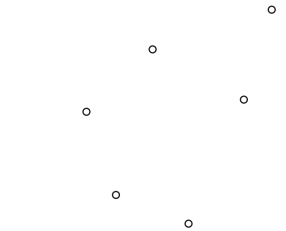
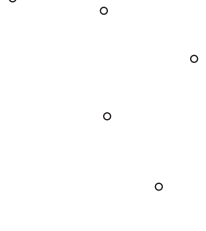
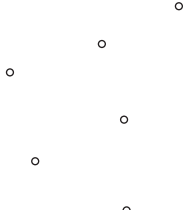
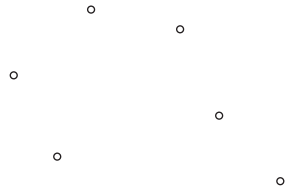
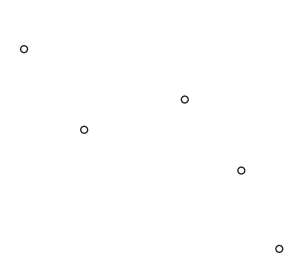
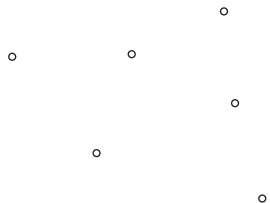
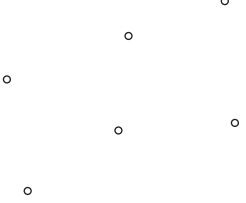
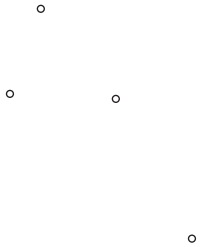
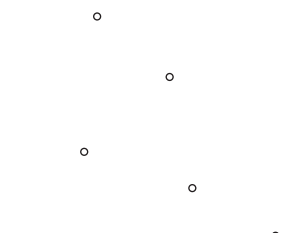
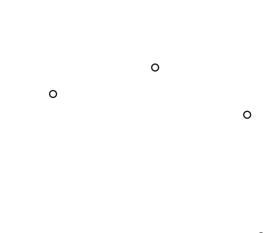
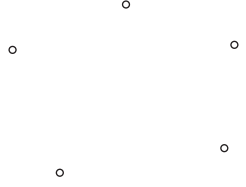
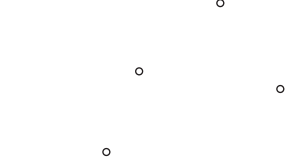
Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

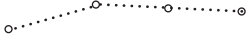
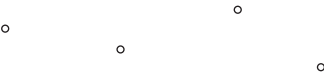




Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line connecting five points, forming a slightly wavy horizontal line. The second section contains five scattered points. The third section contains five scattered points. The bottom section contains five scattered points. This is a dot-marker activity where the goal is to connect the points in each section with straight lines.

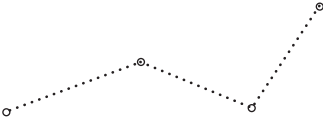

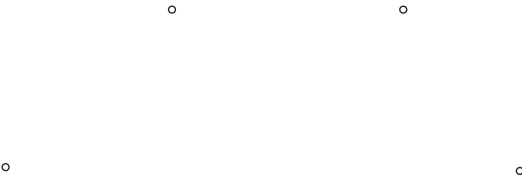



Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line connecting five points to form a wave-like shape. The three lower sections are empty, each containing several scattered dots for a dot-marker activity.

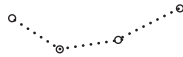



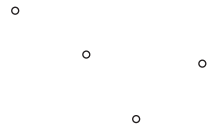




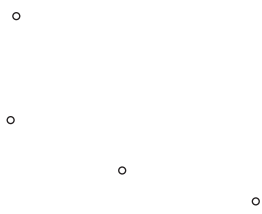


Poveži pike z ravnimi črtami.

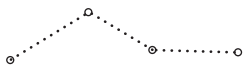
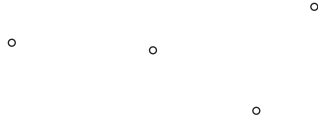







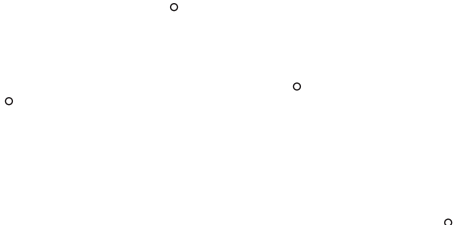


Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

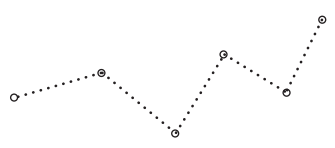
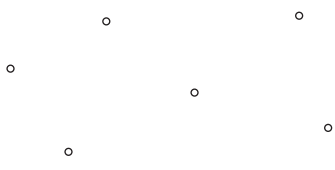
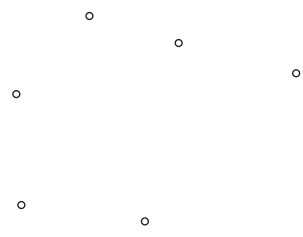

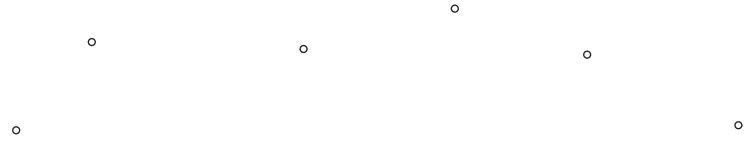
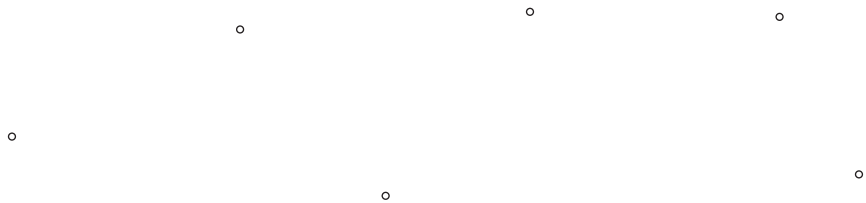
Poveži pike z ravnimi črtami.

The image shows a large rectangular frame divided into four horizontal sections. The top section contains a dotted zigzag line with six points. The three lower sections each contain a set of seven scattered points for a dot-marker activity.

Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line connecting six points in a zig-zag pattern. The three lower sections each contain a set of six scattered points for a dot-marker activity.



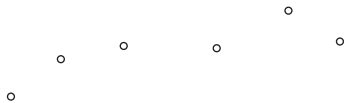

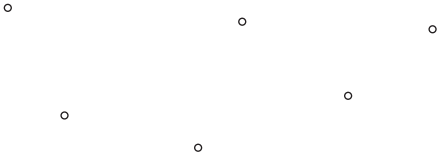

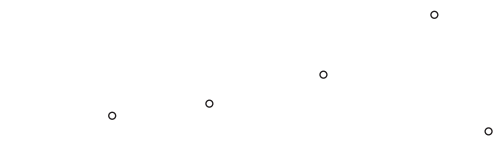


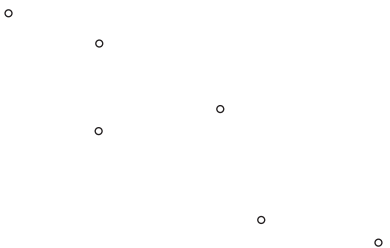
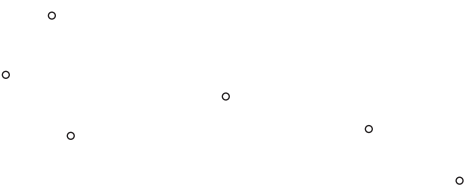
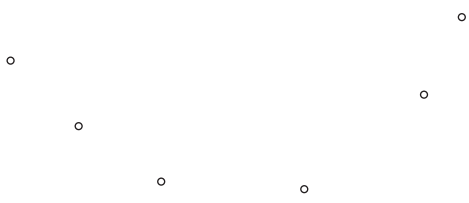
Poveži pike z ravnimi črtami.

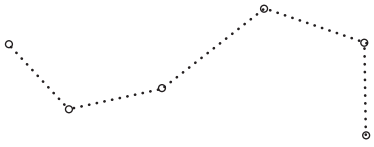


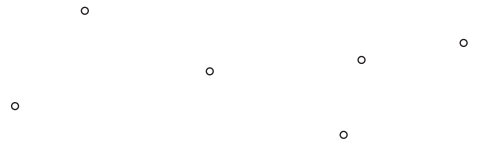


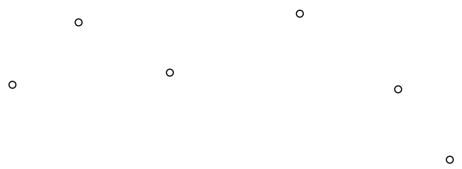


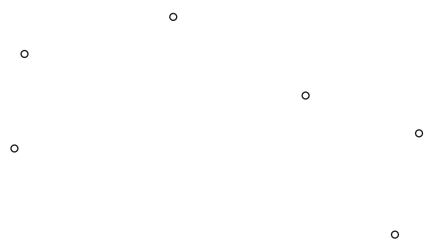

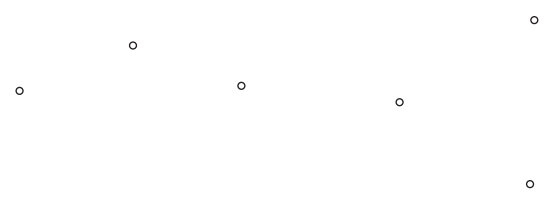
Poveži pike z ravnimi črtami.

The worksheet is divided into seven horizontal sections. The top section contains a dotted line connecting seven points in a zig-zag pattern. The following six sections each contain seven scattered points, intended for the student to connect them with straight lines to practice fine motor skills.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

The image shows a large rectangular frame divided into four horizontal sections. The top section contains a dotted line connecting 10 points in a wavy pattern. The three lower sections each contain 10 scattered points for a dot-marker activity.

Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line connecting 10 points to form a wavy shape. The three lower sections contain scattered points for a dot-marker activity.


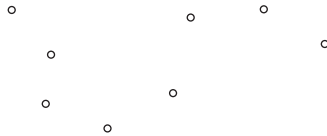
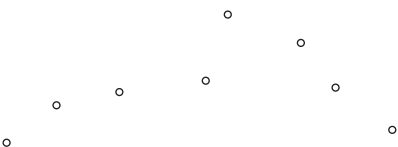
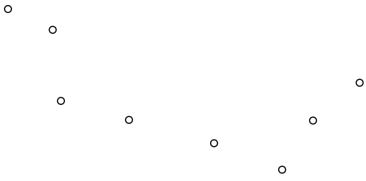
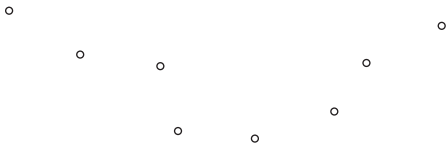
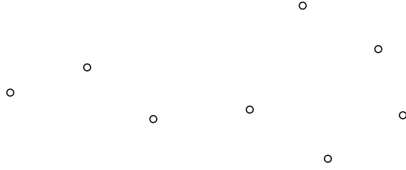
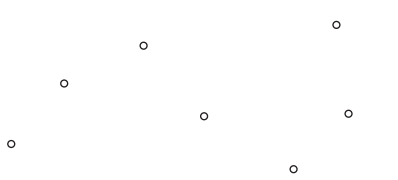
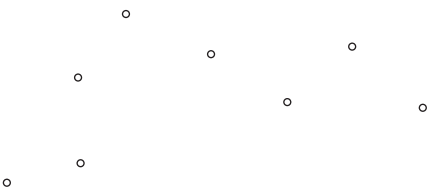
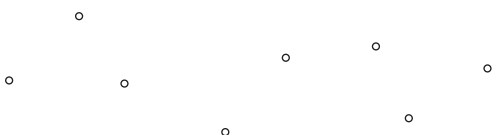
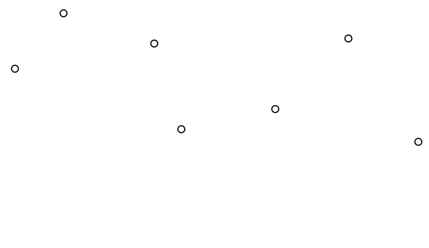
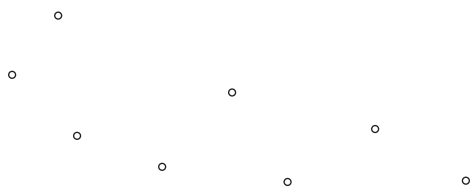
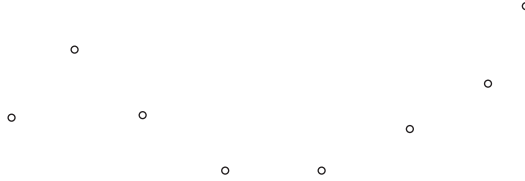
Poveži pike z ravnimi črtami.

The worksheet consists of six horizontal rows. The top row contains a dotted line connecting 10 points in a specific sequence. The following five rows each contain 10 points scattered across the row, intended for the student to connect them with straight lines to form a continuous path.




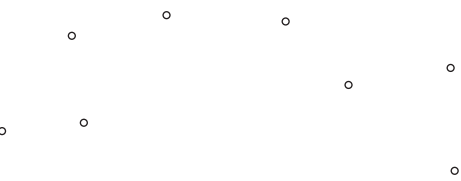

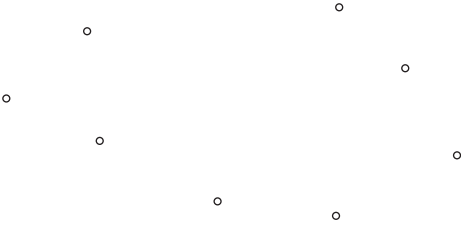
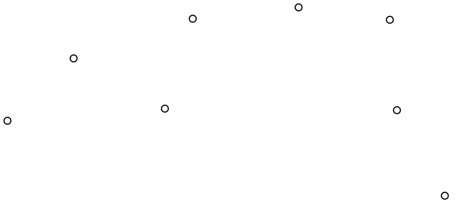

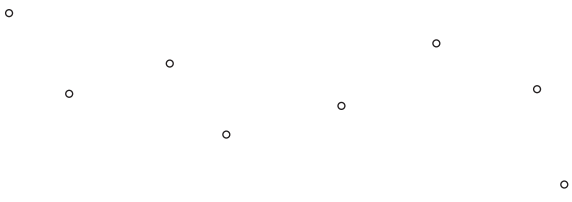
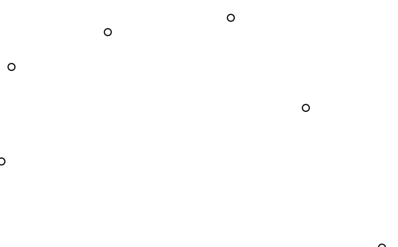
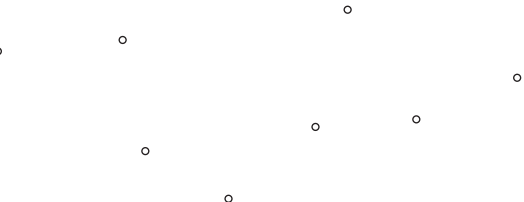
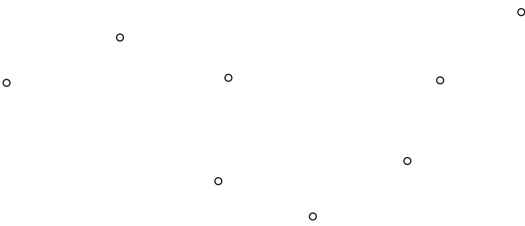
Poveži pike z ravnimi črtami.

The worksheet consists of seven horizontal rows. The top row contains a dotted line connecting 10 points in a zig-zag pattern. The following six rows each contain 10 points scattered across the row, intended for the student to connect them with straight lines.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line connecting 12 points in a wavy pattern. The three lower sections each contain 12 scattered points, intended for a dot-marker activity where the points are connected to form a continuous line.

Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into four horizontal sections. The top section contains a dotted line forming a complex shape with 10 vertices. The three lower sections contain scattered dots corresponding to the vertices of the shape above, intended for a dot-marker activity.

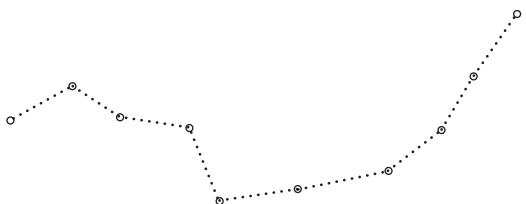
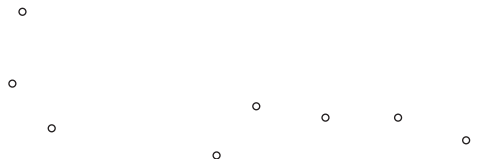
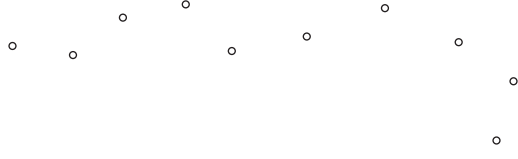
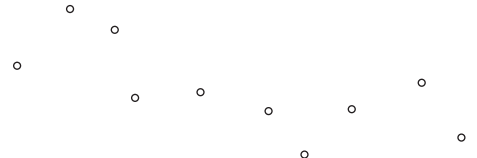
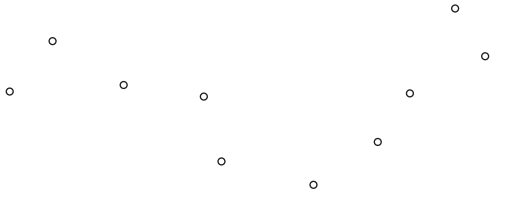
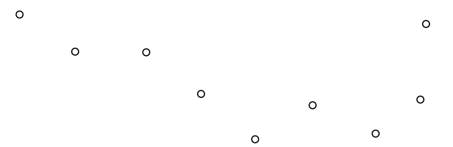
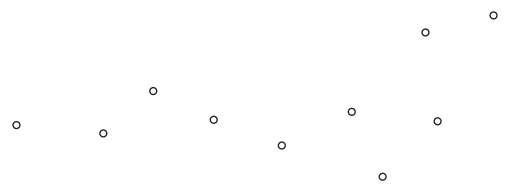
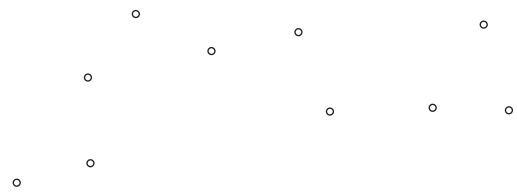
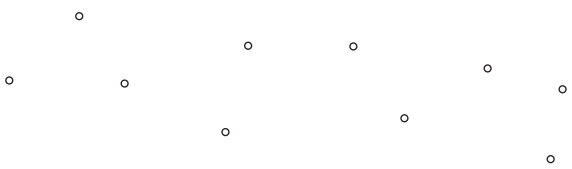
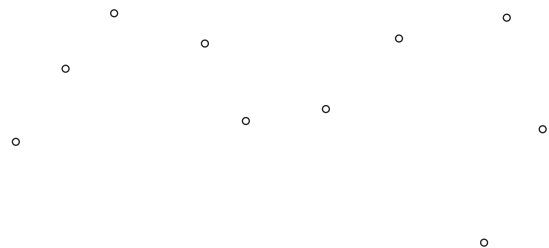
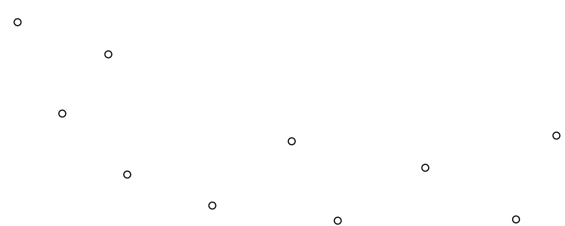
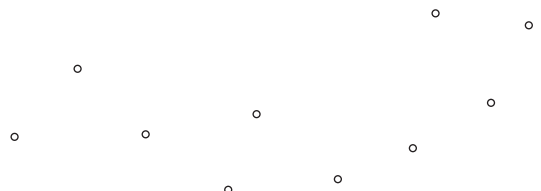
Poveži pike z ravnimi črtami.

The worksheet consists of six horizontal panels. The top panel shows a sequence of 12 dots connected by a dotted line, forming a wavy pattern. The remaining five panels each contain 12 dots arranged in a similar wavy pattern, intended for the user to connect them with straight lines.

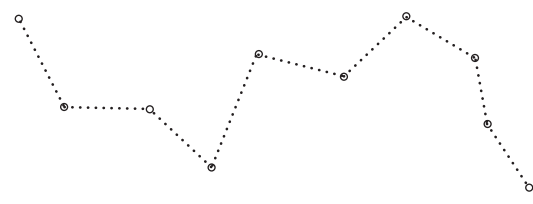
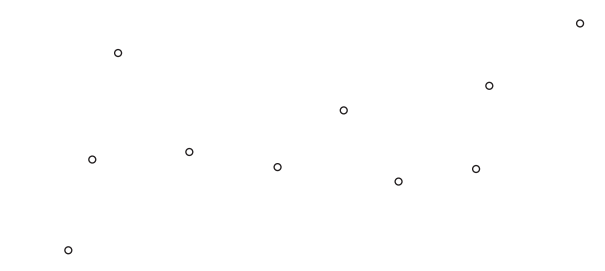
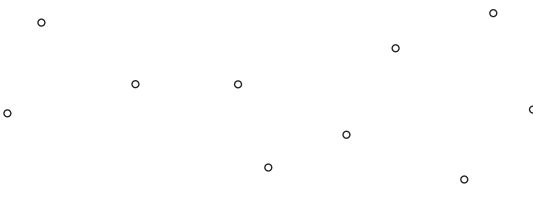
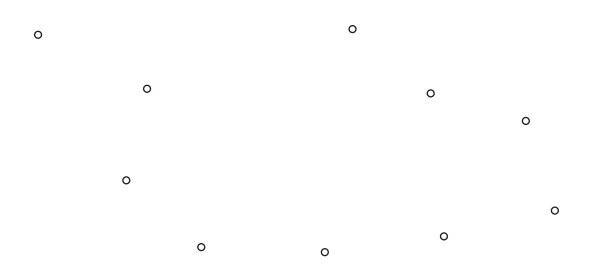
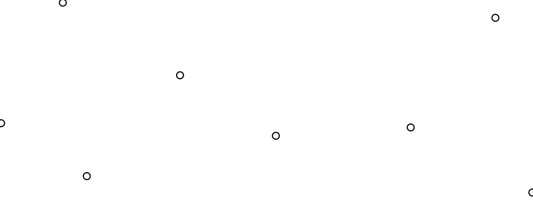
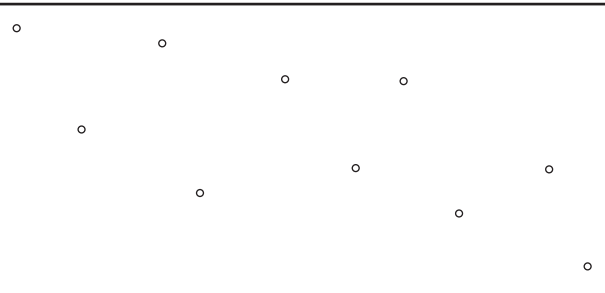
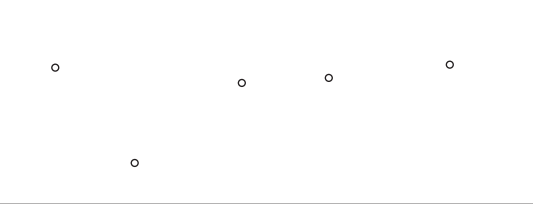
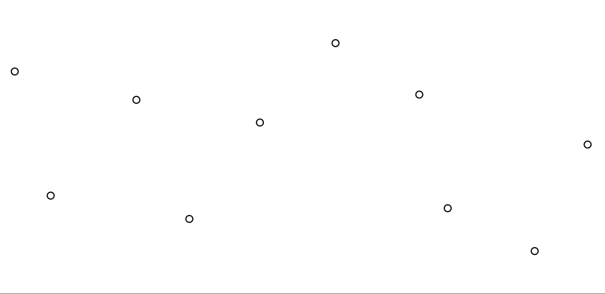
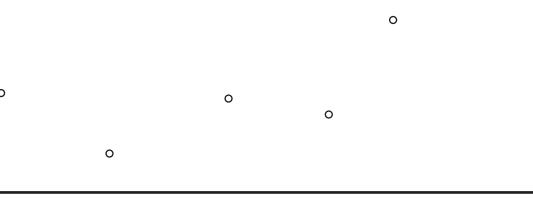
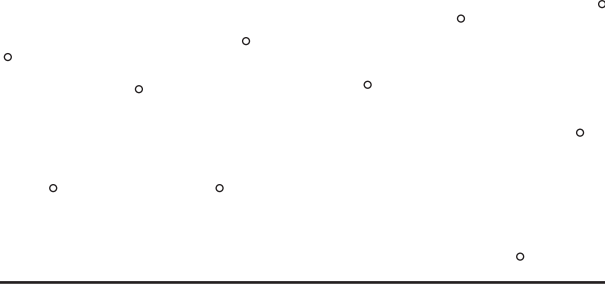

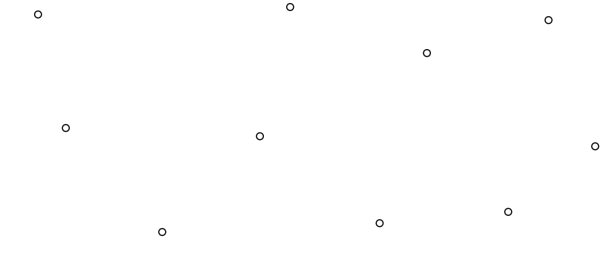
Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into six horizontal sections. The top section contains a dotted line connecting 11 points to form a jagged shape. The following five sections each contain 11 small circles scattered across the space, intended for a dot-marker activity.

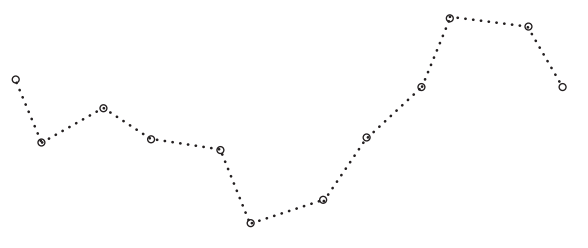

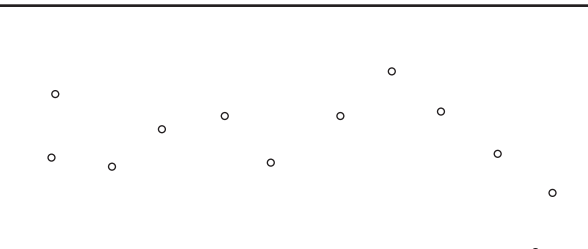
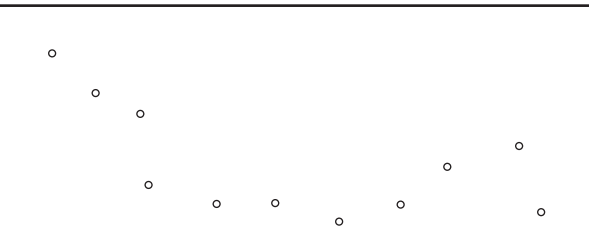
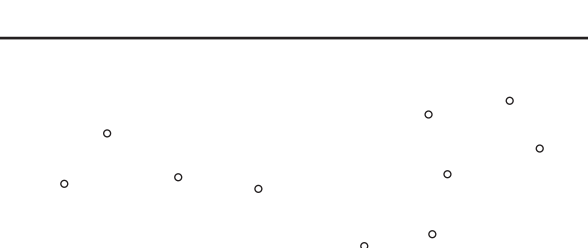
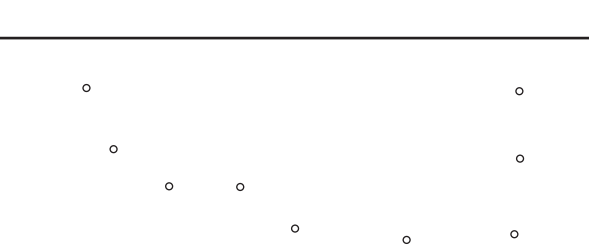
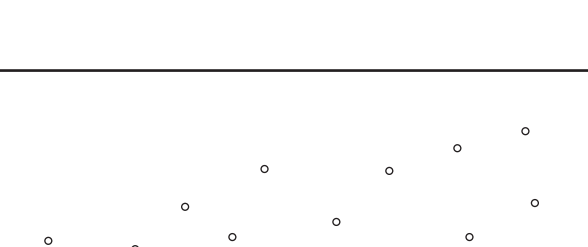
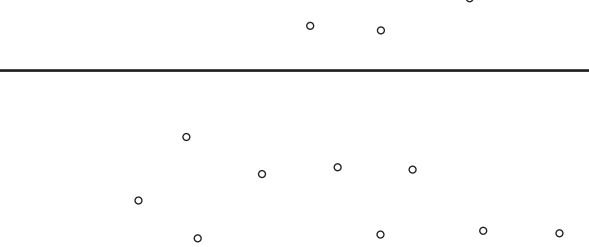
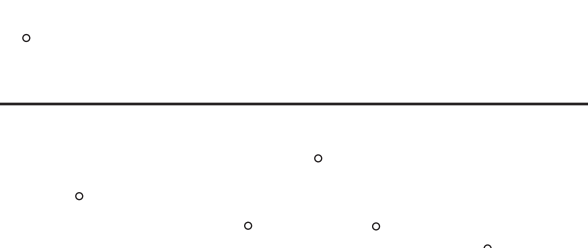
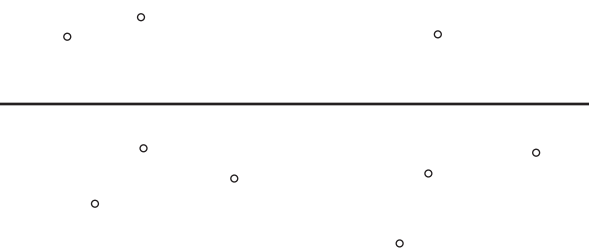
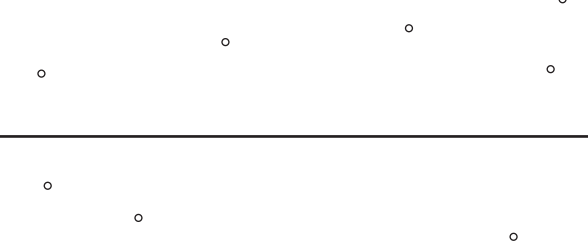
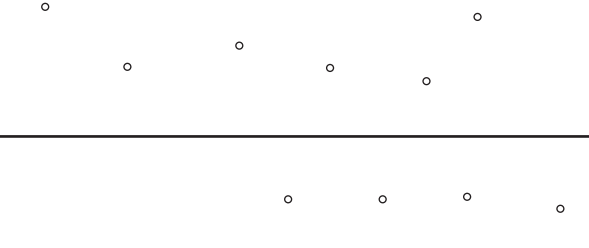
Poveži pike z ravnimi črtami.

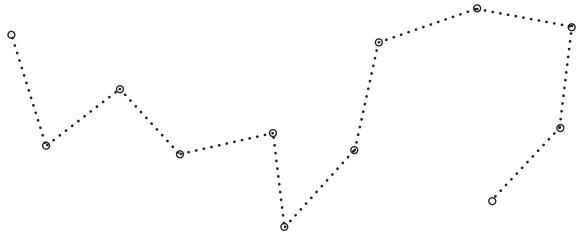
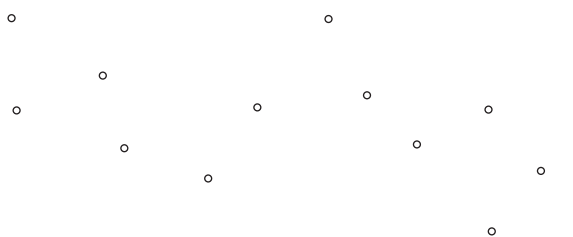
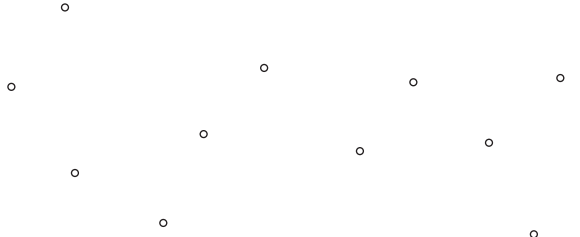
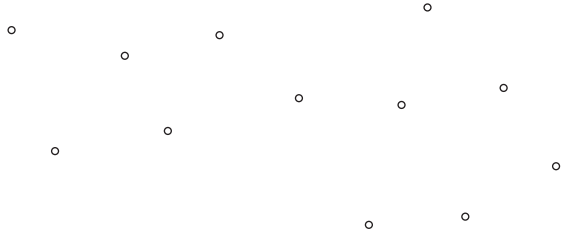
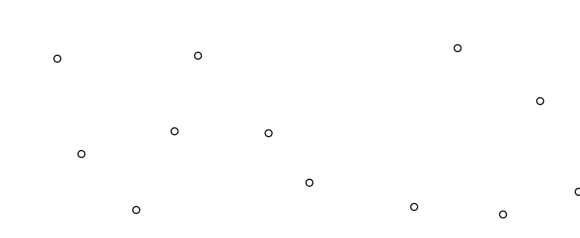
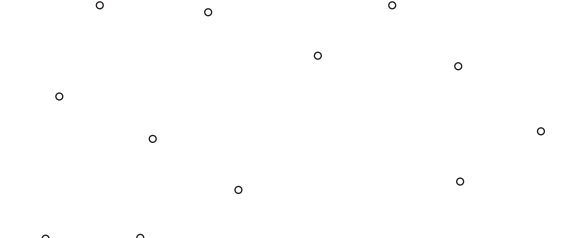
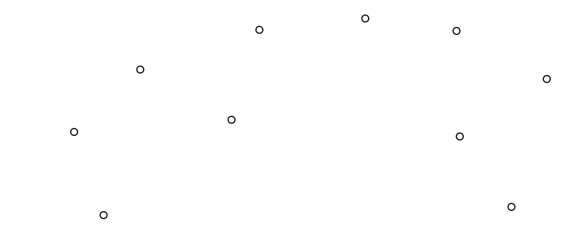
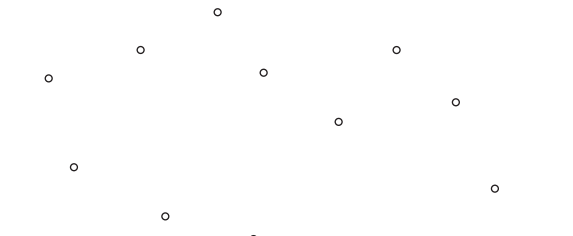
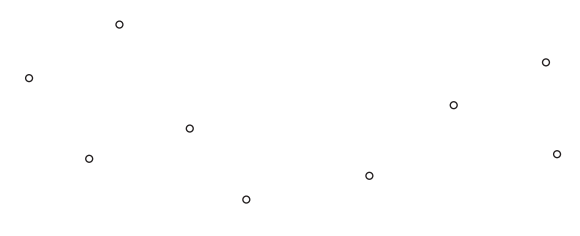
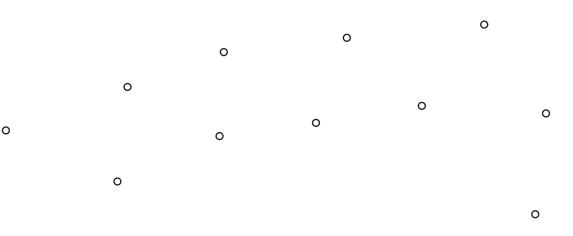
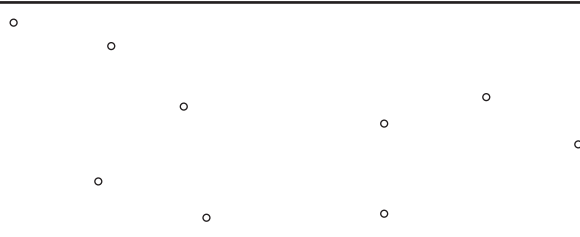
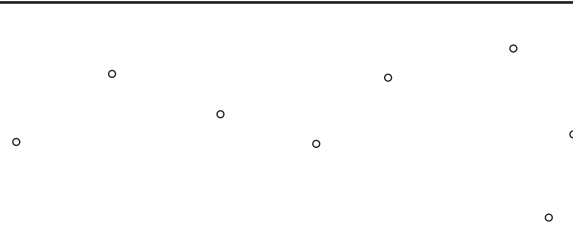
Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

Poveži pike z ravnimi črtami.

The worksheet is divided into six horizontal sections. The top section shows a dotted line that starts on the left, dips down, rises to a peak, dips down again, rises to a higher peak, dips down, rises to a third peak, and finally dips down on the right. The subsequent five sections each contain a set of dots scattered across the width of the page. These dots are positioned such that they can be connected to the points on the dotted line in the top section by drawing straight lines.

Poveži pike z ravnimi črtami.

The worksheet consists of six horizontal panels. The top panel shows a sequence of 15 dots connected by a dotted line, forming a path that starts at the top left, goes down, up, right, down, up, right, and finally down. The remaining five panels each contain 15 dots arranged in a similar pattern, intended for the student to connect them with straight lines.

Poveži pike z ravnimi črtami.

The worksheet is divided into six horizontal sections. The top section contains a dotted line forming a wavy shape. The following five sections each contain a set of scattered dots for tracing practice.

Poveži pike z ravnimi črtami.

The image shows a large rectangular area divided into six horizontal sections. The top section contains a dotted line tracing a path through several points. The remaining five sections contain scattered points for a dot-marker activity.

VIRI

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