Constructing symmetry axes with ruler and compass — Further practice

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Further practice 11

K and L are corresponding points on a slanted segment. Construct the axis without measuring its angle.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice 12

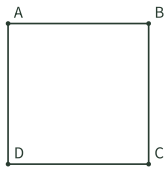
R and S are corresponding points. Construct the axis, preserving the same compass radius from both centres.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice 13

Use ruler and compass to draw all axes of a square. Include both side-midpoint axes and vertex axes.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice

14

Use ruler and compass to construct all axes of a non-square rectangle. Give a reason for leaving out the diagonals.

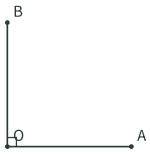


Geometry diagram; not drawn to scale except for construction tasks.

Extension

15

OA and OB are two rays forming a right angle. Construct the symmetry axis of this two-ray figure using ruler and compass, and explain which ray each side reflects to.

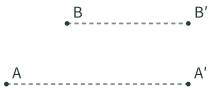


Geometry diagram; not drawn to scale except for construction tasks.

Extension

16

A corresponds to A′ and B corresponds to B′. Can one line exchange both supplied pairs? Use ruler and compass to compare their required axes, rather than choosing a line halfway between them.



Geometry diagram; not drawn to scale except for construction tasks.