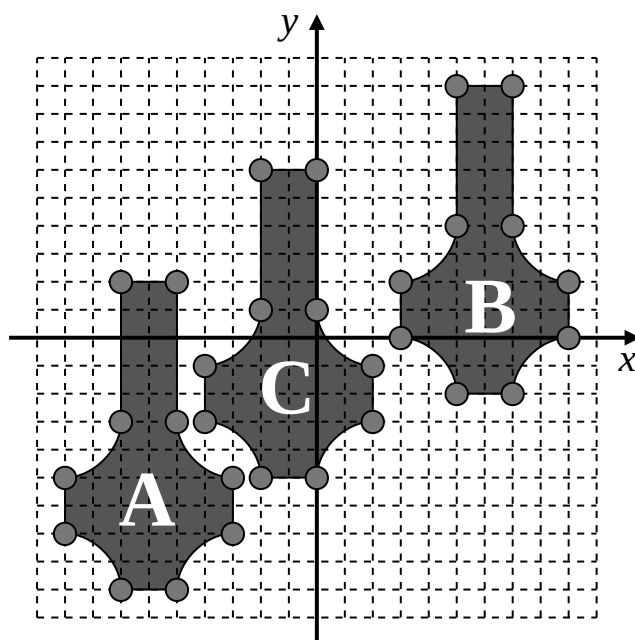


9.2 Answers

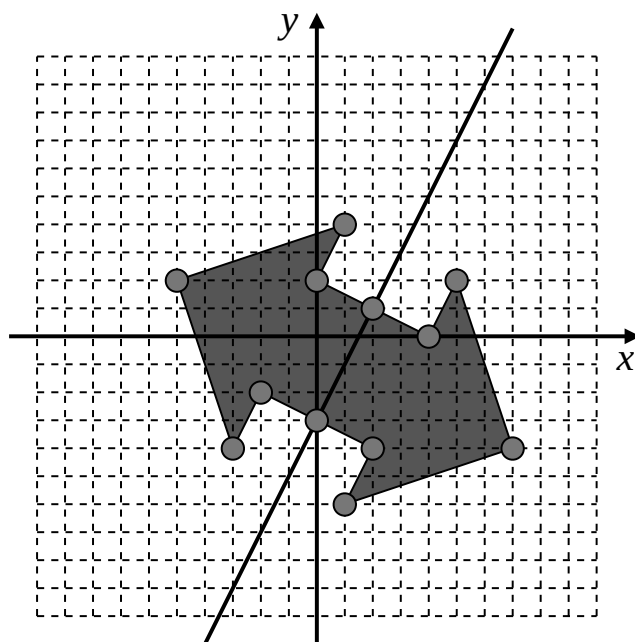
GCSE Mathematics Transformation Geometry

Answer 1



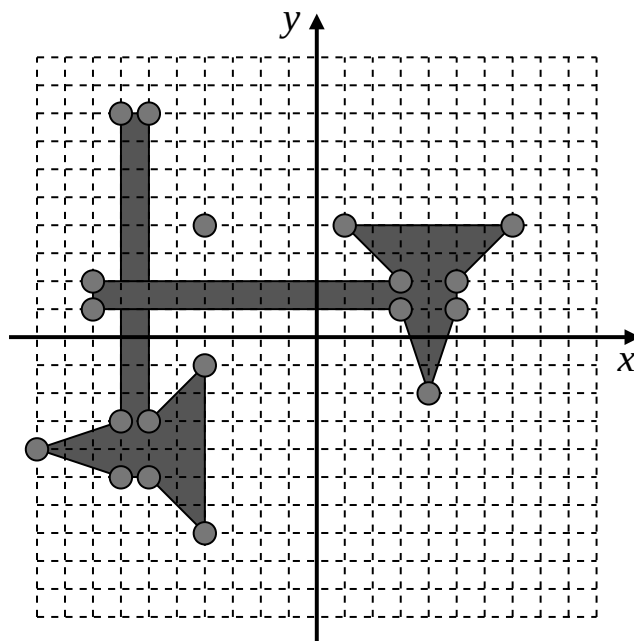
(b) $\begin{pmatrix} 12 \\ 7 \end{pmatrix}$

Answer 2



(b) $y = 2x - 3$

Answer 3

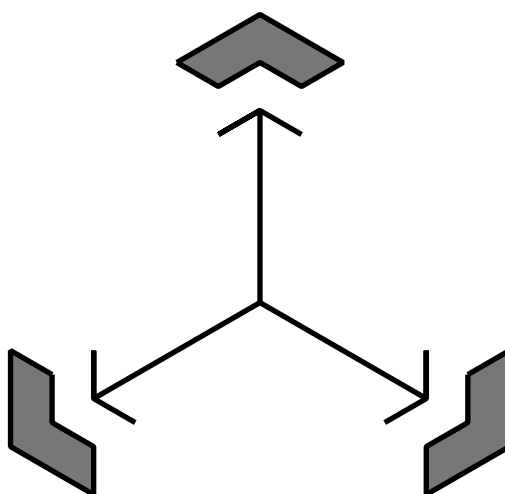


Answer 4

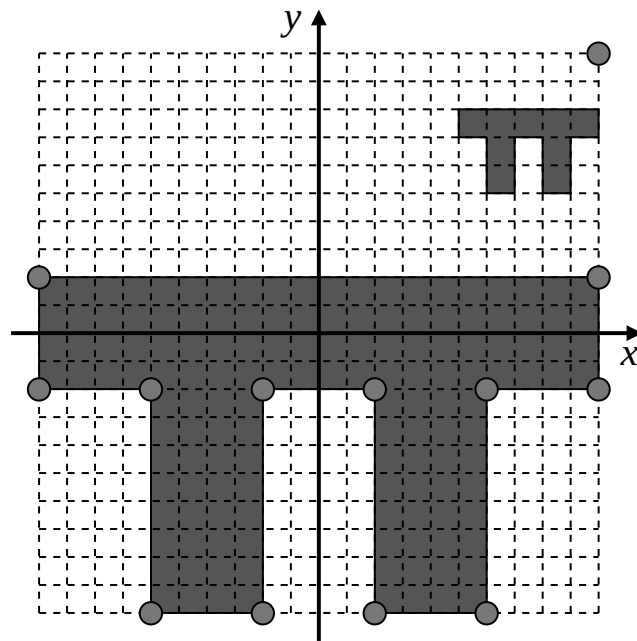
Rotational symmetry of order 6.
No mirror symmetry.

Answer 5

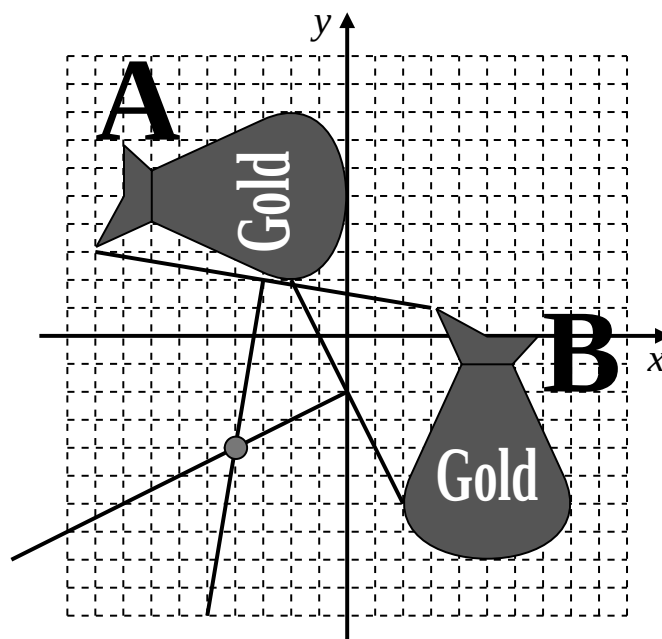
For example...



Answer 6



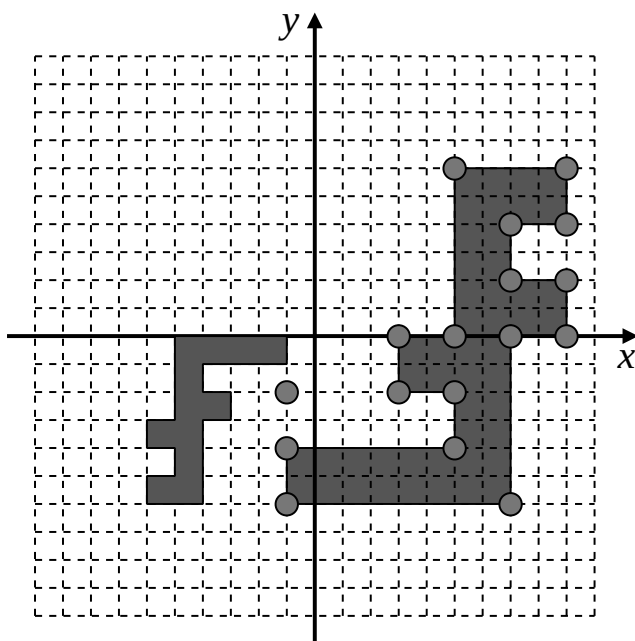
Answer 7



Rotation of -90° (90° clockwise) about the point $(-4, -4)$

Construction shown but can be found using tracing paper and experimentation.

Answer 8



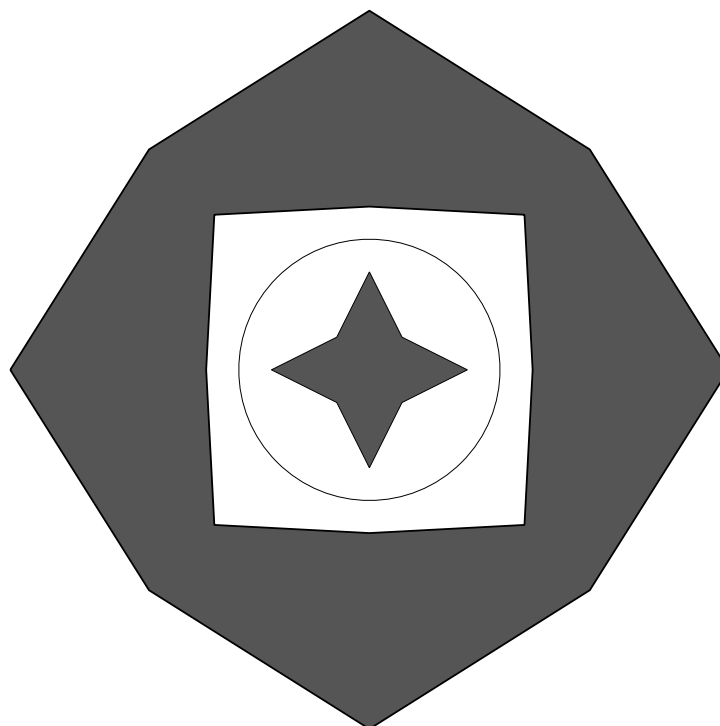
Answer 9

(a) $\begin{pmatrix} 15 \\ 4 \end{pmatrix}$

(b) $\begin{pmatrix} 7 \\ -13 \end{pmatrix}$

(c) $\begin{pmatrix} -8 \\ -6 \end{pmatrix}$

Answer 10



A rough idea of what one gets using straight lines between eight key points.

This document is a part of a **Mathematics Community Outreach Project** initiated by Shrewsbury School

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In October 2020, Shrewsbury School was voted “**Independent School of the Year 2020**”

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk