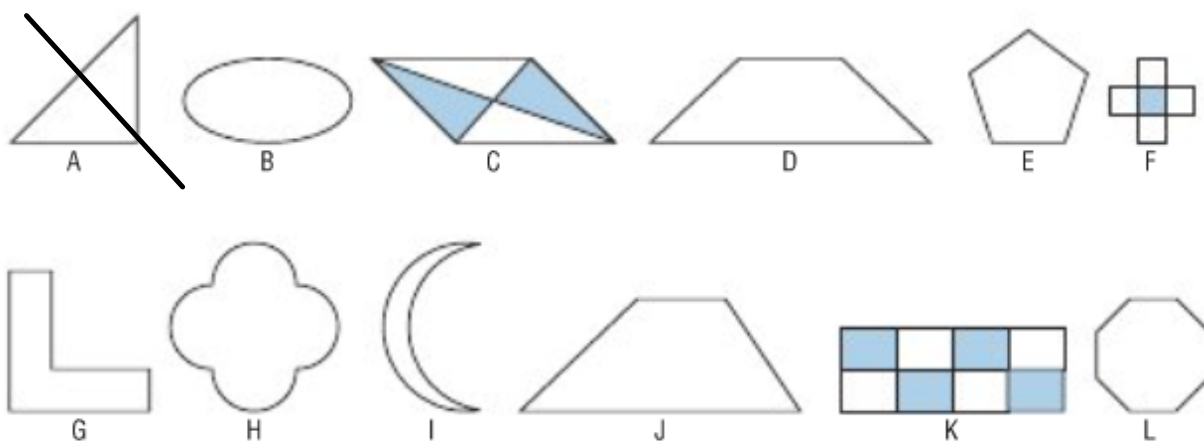




Section 7.5 Reflections and Line Symmetry



Your teacher will give you a large copy of the shapes below.

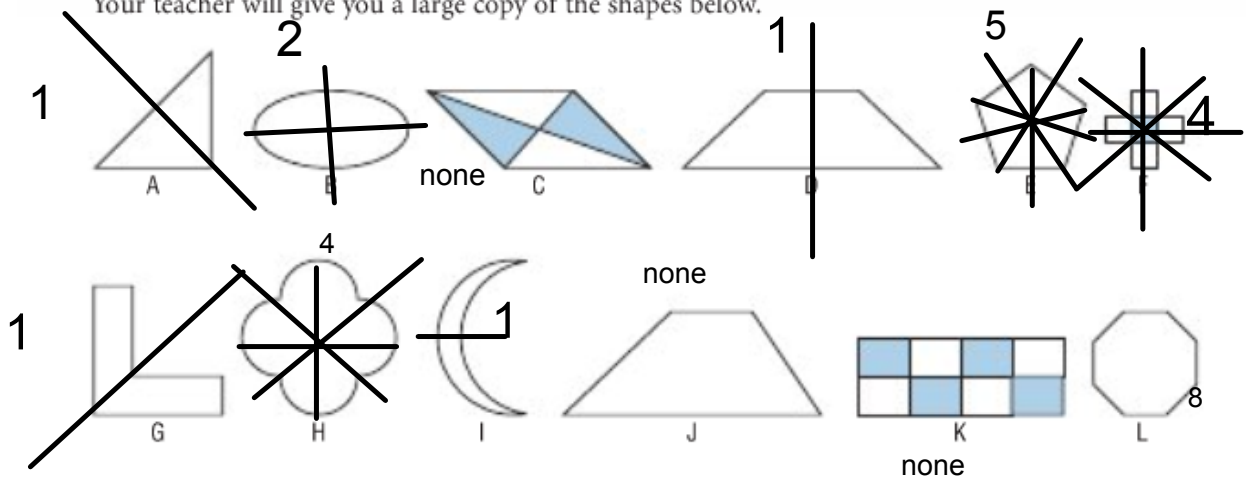


Which shapes have the same number of lines of symmetry?

Sort the shapes according to the number of lines of symmetry they have.

Which shapes do not have line symmetry? How can you tell?

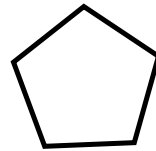
Your teacher will give you a large copy of the shapes below.

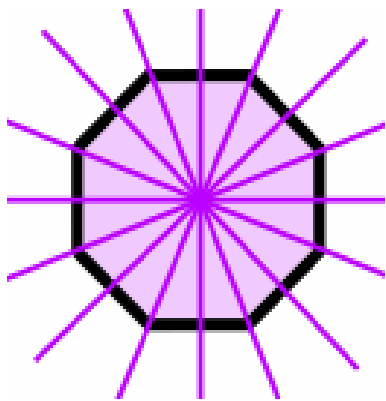


Which shapes have the same number of lines of symmetry?

Sort the shapes according to the number of lines of symmetry they have.

Which shapes do not have line symmetry? How can you tell?





A **Regular Octagon** (8 sides)
has **8** Lines of Symmetry

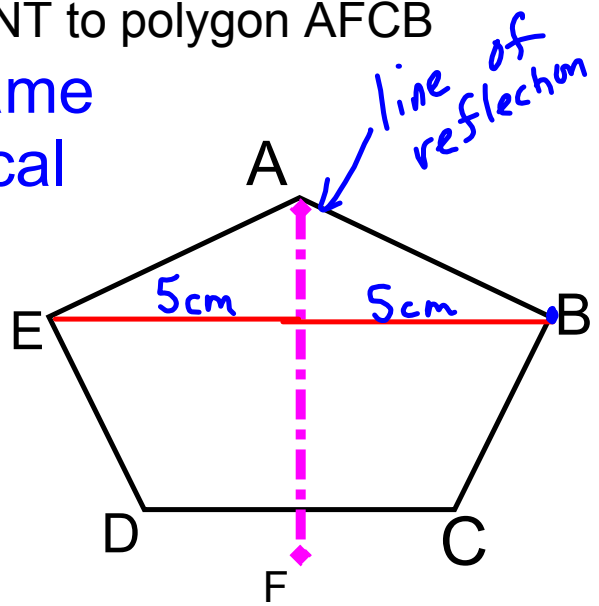
A ***line of symmetry*** is also known as a ***line of reflection***.



Polygon AFDE is CONGRUENT to polygon AFCB

- ↳ the same
- ↳ identical

Each point on one side of the line of symmetry has a corresponding point on the other side. These corresponding points are equal distance, equidistant, from the line of symmetry



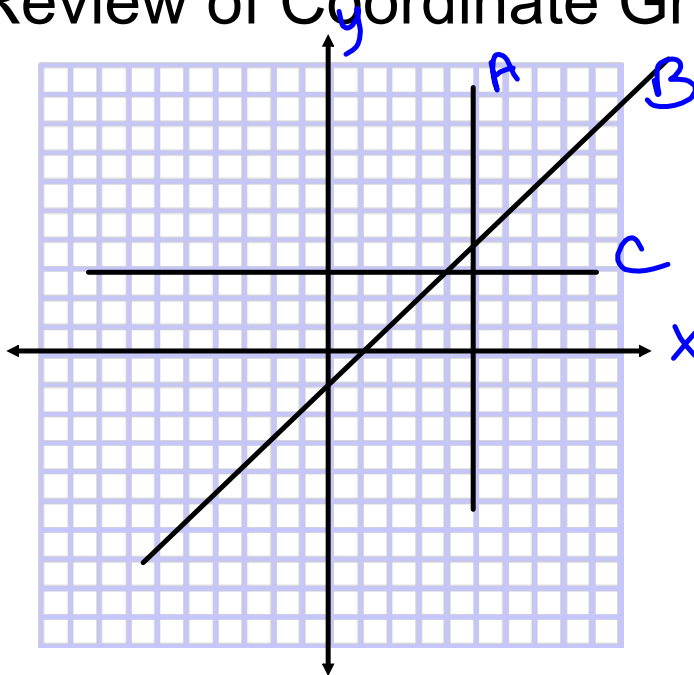
* Not a regular pentagon *

Quick Review of Coordinate Grid

oblique???

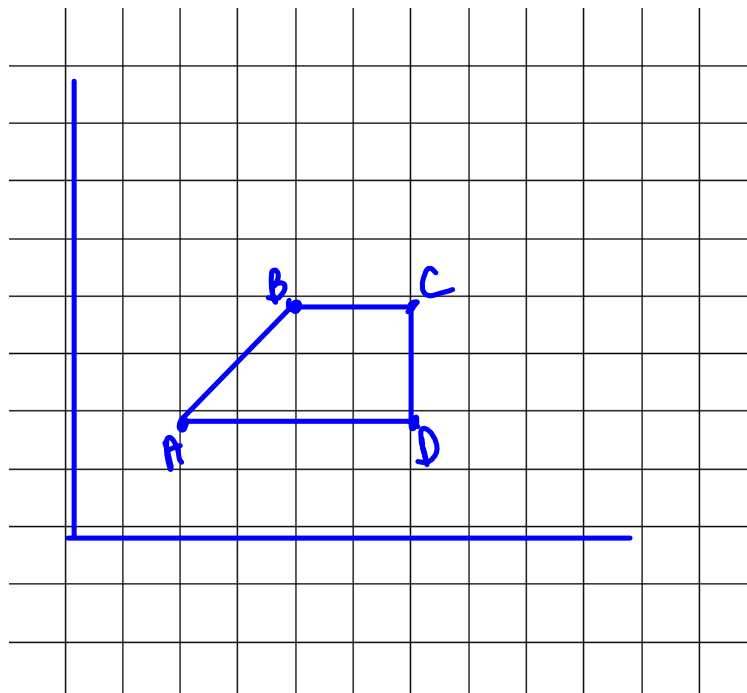
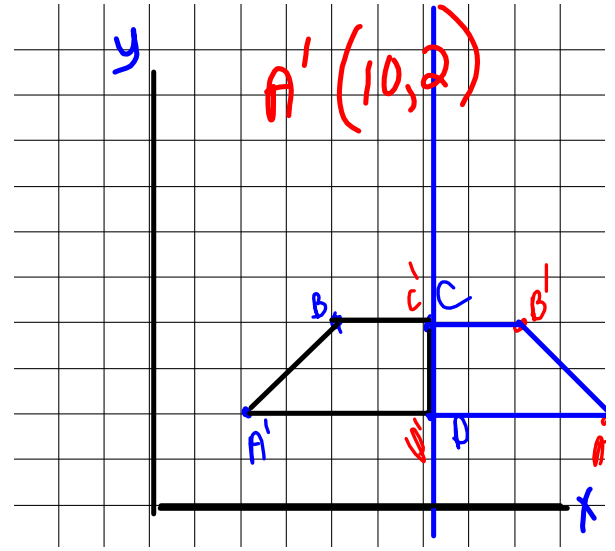
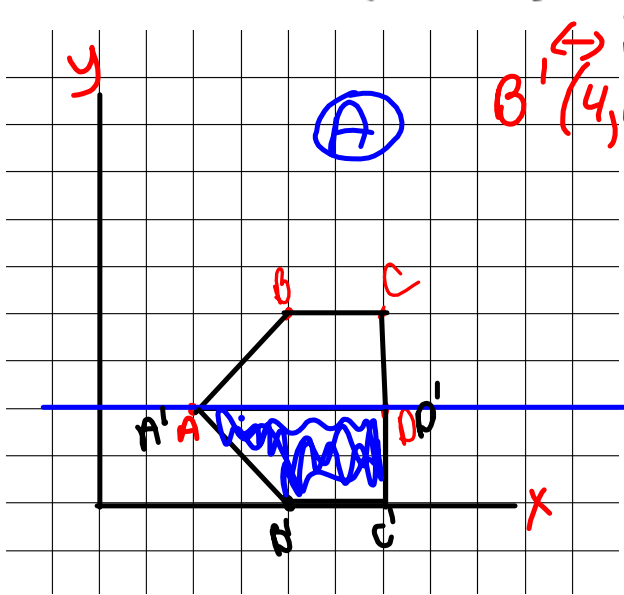
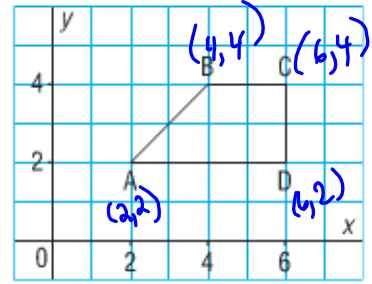
vertical???

horizontal???



Quadrilateral ABCD is part of a larger shape.

- Draw the image of ABCD after each reflection below.
 - Write the coordinates of the larger shape formed by ABCD and its image.
 - Describe the larger shape and its symmetry.
- a reflection in the horizontal line through 2 on the y -axis
 - a reflection in the vertical line through 6 on the x -axis
 - a reflection in an oblique line through $(0, 0)$ and $(6, 6)$



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