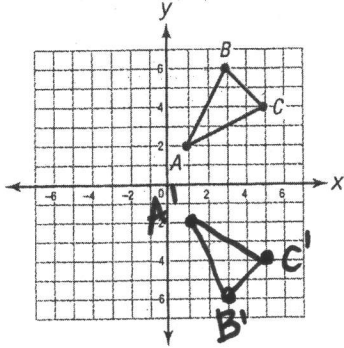


## Practice

Draw each reflected image as described and name its vertices. Identify the coordinates of the vertices of the image.

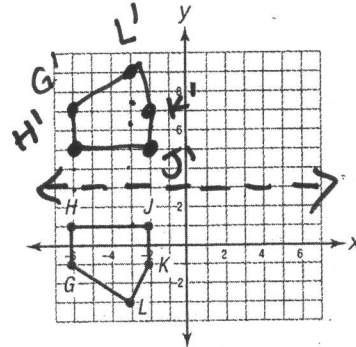
1. Reflect  $\triangle ABC$  across the x-axis.



$A'(1, -2)$   $B'(3, -5)$   $C'(5, -4)$

**REMEMBER** When a point is reflected across the x-axis, the sign of its y-coordinate changes.

2. Reflect pentagon  $GHJKL$  across the line  $y = 3$ .



$G'(-6, 1)$   $H'(-6, -1)$   $J'(-2, -1)$   
 $K'(-2, 1)$   $L'(-3, 9)$

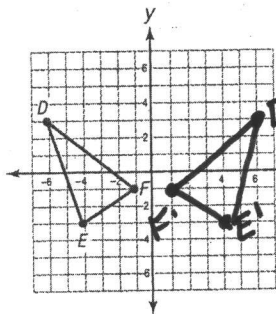
Fill in each blank with an appropriate word or phrase.

- A reflection results in two figures that look like mirror images of each other.
- Lines that meet and form right angles are called perpendicular lines.
- A point and its reflection are each the same distance from line of reflection.
- The path that a point takes across the line of reflection is perpendicular the line of reflection.

Use the given function to transform  $\triangle DEF$ . Then describe the transformation in words.

7.  $R(x, y) = (-x, y)$

$D(-6, 3)$   
 $E(-4, -3)$   
 $F(-1, -1)$

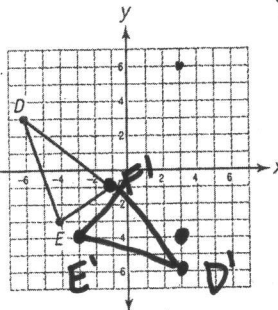


$D'(6, 3)$   
 $E'(4, -3)$   
 $F'(1, -1)$

reflect across y-axis

8.  $R(x, y) = (y, x)$

$D(-6, 3)$   
 $E(-4, -3)$   
 $F(-1, -1)$



$D'(3, 6)$   
 $E'(-3, -4)$   
 $F'(-1, -1)$

reflect across  $y=x$