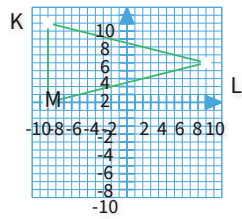




#1

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{5}$ , centered at the origin.



$K'(-2, 1)$

$K'(-2, 2)$

$K'(-2, 2)$

$L'(3, 1)$

$L'(2, 1)$

$L'(2, 1)$

☐  $M'(-1, 1)$

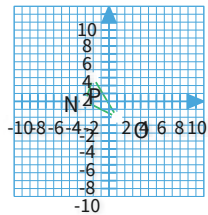
☐  $M'(-2, 1)$

☐  $M'(-2, 0)$

Show your work

#2

Write the coordinates of the vertices after a dilation with a scale factor of 3, centered at the origin.



$N'(-6, 9)$

$N'(-6, 9)$

$N'(-6, 9)$

$O'(4, -6)$

$O'(3, -6)$

$O'(3, -5)$

☐  $P'(-9, 1)$

☐  $P'(-9, 0)$

☐  $P'(-9, 0)$

Show your work

#3

Write the coordinates of the vertices after a dilation with a scale factor of 3, centered at the origin.



$$M(0,0) \rightarrow M'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$N(3,-3) \rightarrow N'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

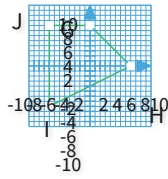
$$O(-2,-3) \rightarrow O'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work



#4

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{4}$ , centered at the origin.



$G'(0, 2)$

$G'(0, 2)$

$G'(0, 2)$

$H'(2, 0)$

$H'(3, 0)$

$H'(2, 0)$

$I'(-2, -3)$

$I'(-2, -2)$

$I'(-2, -2)$

☐  $J'(-3, 2)$

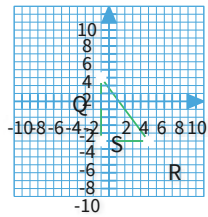
☐  $J'(-2, 3)$

☐  $J'(-2, 2)$

Show your work

#5

Write the coordinates of the vertices after a dilation with a scale factor of 2, centered at the origin.



$Q'(-2, 6)$

$Q'(-2, 6)$

$Q'(-2, 6)$

$R'(8, -10)$

$R'(10, -9)$

$R'(10, -10)$

☐  $S'(-2, -9)$

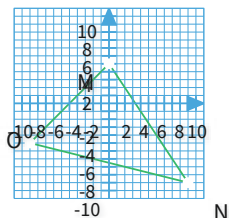
☐  $S'(-2, -10)$

☐  $S'(-2, -10)$

Show your work

#6

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{5}$ , centered at the origin.



$M'(0, 1)$

$M'(0, 2)$

$M'(0, 1)$

$N'(2, -2)$

$N'(3, -2)$

$N'(2, -2)$

☐  $O'(-2, 0)$

☐  $O'(-1, 0)$

☐  $O'(-2, -1)$

Show your work



#7

Write the coordinates of the vertices after a dilation with a scale factor of 2, centered at the origin.

$$S(5,2) \rightarrow S'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$T(2,-1) \rightarrow T'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

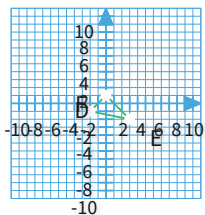
$$U(-4,-2) \rightarrow U'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$V(-3,5) \rightarrow V'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work

#8

Write the coordinates of the vertices after a dilation with a scale factor of 5, centered at the origin.



$$D'(0, 5)$$

$$D'(0, 5)$$

$$D'(0, 5)$$

$$E'(15, -11)$$

$$E'(16, -10)$$

$$E'(15, -10)$$

☐  $F'(-10, -5)$

☐  $F'(-10, -6)$

☐  $F'(-10, -5)$

Show your work

#9

Write the coordinates of the vertices after a dilation with a scale factor of 5, centered at the origin.



$$R(-1,2) \rightarrow R'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$S(1,0) \rightarrow S'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$T(-1,0) \rightarrow T'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work



#10

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{5}$ , centered at the origin.



$$I(-5, 5) \rightarrow I'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

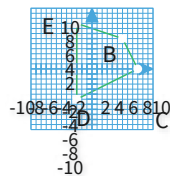
$$J(0, -5) \rightarrow J'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$K(-10, -10) \rightarrow K'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work

#11

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{3}$ , centered at the origin.



$$B'(2, 2)$$

$$B'(2, 2)$$

$$B'(2, 2)$$

$$C'(2, 0)$$

$$C'(3, 0)$$

$$C'(3, 0)$$

$$D'(-1, -2)$$

$$D'(-1, -2)$$

$$D'(-1, -1)$$

☐  $E'(-1, 4)$

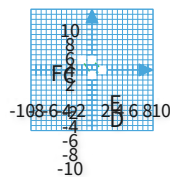
☐  $E'(-1, 3)$

☐  $E'(-2, 3)$

Show your work

#12

Write the coordinates of the vertices after a dilation with a scale factor of 4, centered at the origin.



$$C'(0, 8)$$

$$C'(0, 8)$$

$$C'(0, 8)$$

$$D'(8, 0)$$

$$D'(8, 0)$$

$$D'(9, 0)$$

$$E'(0, -4)$$

$$E'(0, -3)$$

$$E'(0, -4)$$

☐  $F'(-8, 8)$

☐  $F'(1, 8)$

☐  $F'(-8, 10)$

Show your work

| Question | Answer                       |
|----------|------------------------------|
| #1       | choice 3                     |
| #2       | choice 2                     |
| #3       | 0, 9, -6, 0, -9, -9          |
| #4       | choice 3                     |
| #5       | choice 3                     |
| #6       | choice 3                     |
| #7       | 10, 4, -8, -6, 4, -2, -4, 10 |
| #8       | choice 3                     |
| #9       | -5, 5, -5, 10, 0, 0          |
| #10      | -1, 0, -2, 1, -1, -2         |
| #11      | choice 2                     |
| #12      | choice 1                     |