

#1

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



$$Q(1, 4) \rightarrow Q'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$R(3, -1) \rightarrow R'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

Show your work

#2

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



$$K(0, 10) \rightarrow K'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

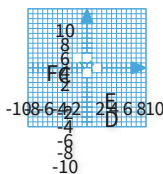
$$L(10, -5) \rightarrow L'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$M(-10, -5) \rightarrow M'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work

#3

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

#4

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



$$U(-1, 3) \rightarrow U'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

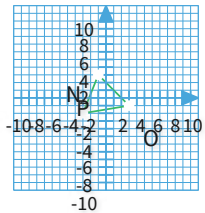
$$V(4, -2) \rightarrow V'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

Show your work

#5

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



$$N'(-3, 9)$$

$$N'(9, -3)$$

$$N'(-9, -6)$$

$$O'(6, -3)$$

$$O'(9, -3)$$

$$O'(9, -4)$$

$P'(-9, -7)$

$P'(-9, -6)$

$P'(-9, -6)$

Show your work

#6

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



$$J(4, 4) \rightarrow J'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

$$L(0, -8) \rightarrow L'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$M(-4, 8) \rightarrow M'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work

#7

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

$$G(10,5) \rightarrow G'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

$$H(5,-10) \rightarrow H'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

$$J(-10,5) \rightarrow J'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

Show your work

#8

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

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

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

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

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

Show your work

#9

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

$$V(-2,0) \rightarrow V'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

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

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.



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

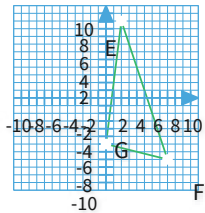
$$V(5, -5) \rightarrow V'(\boxed{\phantom{00}}, \boxed{\phantom{00}})$$

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

Show your work

#11

Write the coordinates of the vertices after a dilation with a scale factor of  $\frac{1}{2}$ , centered at the origin.



$$E'(1, 6)$$

$$E'(1, 5)$$

$$E'(1, 5)$$

$$F'(6, -4)$$

$$F'(4, -4)$$

$$F'(4, -4)$$

$G'(1, -2)$

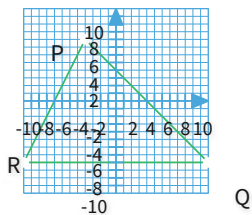
$G'(0, -3)$

$G'(0, -2)$

Show your work

#12

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



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

$$P'(-1, 3)$$

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

$$Q'(3, -2)$$

$$Q'(2, -2)$$

$$Q'(3, -2)$$

$R'(-3, -1)$

$R'(-2, -1)$

$R'(-3, -2)$

Show your work

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