

NAME : _____

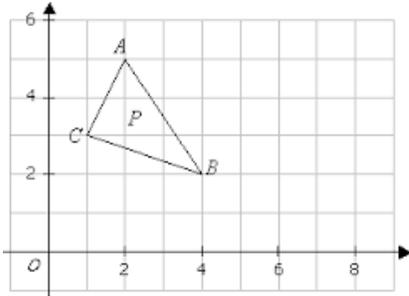
CLASS : _____

DATE : _____

Homework 3.1 due Mon 11/2 *Woo Hoo, No problems to attach*

17 Questions

1.

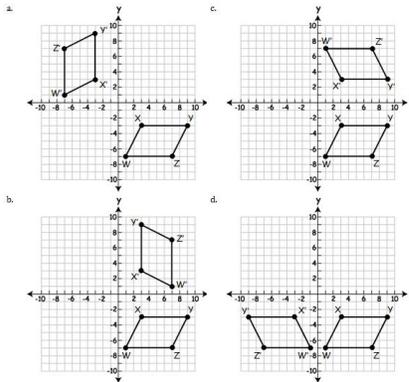


Triangle ABC is going to be translated. How is ABC being translated if the rule $(x,y) \rightarrow (x+3, y-2)$ is used?

- a) 3 up and 2 left
 c) 3 left and 2 up

- b) 3 right and 2 down
 d) 3 right and 2 up

2.

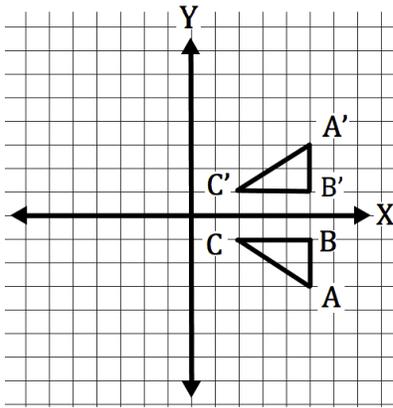


Which answer represents a reflection across the x-axis, using the algebraic rule $(x,y) \rightarrow (x, -y)$?

- a) d
 c) b

- b) c
 d) a

3.



Identify the transformation from ABC to A'B'C'.

a) 90° clockwise rotation

b) 90° counter clockwise rotation

c) Reflection across the y-axis

d) Reflection across the x-axis

4. a transformation that changes the size of a figure, but not the shape

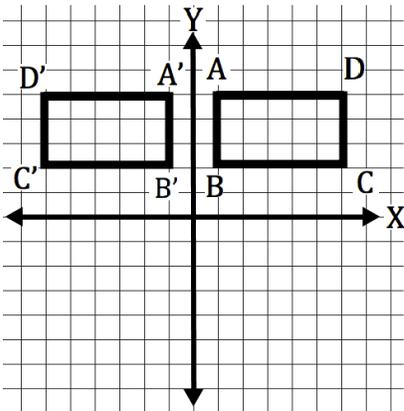
a) translation

b) rotation

c) reflection

d) dilation

5.



Identify the transformation from ABCD to A'B'C'D'.

a) Translation

b) Reflection across the x-axis

c) Reflection across the y-axis

d) 90° counter clockwise rotation

6. When you translate

$(x-2, y+6)$ the figure will move _____.

a) 2 units right and 6 units right

b) 2 units left and 6 units down

c) 2 units left and 6 units up

d) 2 units left 6 units right

7. What does a translation do to an image?

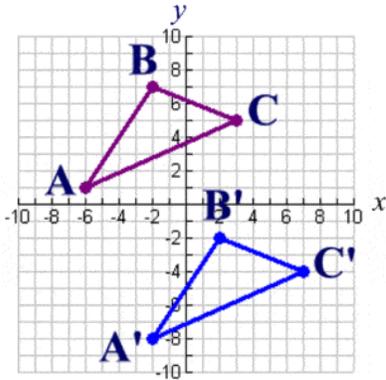
a) Turns it 90° clockwise

b) Mirrors it

c) Shrinks it

d) Slides it

8.



How is triangle ABC being translated to triangle A'B'C'?

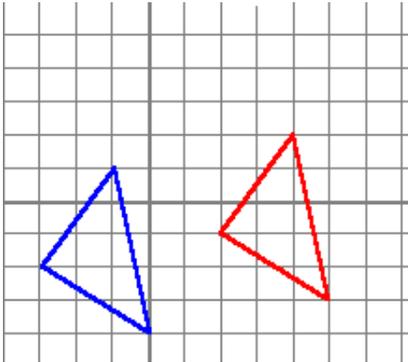
a) $(x, y) \rightarrow (x - 8, y + 3)$

b) $(x, y) \rightarrow (x - 4, y - 9)$

c) $(x, y) \rightarrow (x + 8, y - 3)$

d) $(x, y) \rightarrow (x + 4, y - 9)$

9.



What transformation is happening to the red triangle to get to the blue triangle?

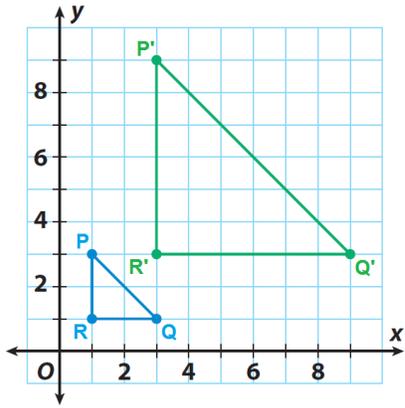
a) Translation

b) Rotation

c) Reflection

d) Dilation

10.



Which transformation is being used on Triangle PRQ?

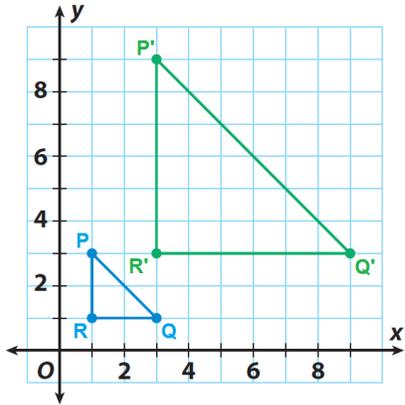
a) Reflection

b) Dilation

c) Rotation

d) Translation

11.



In the dilation shown, what is the scale factor used?

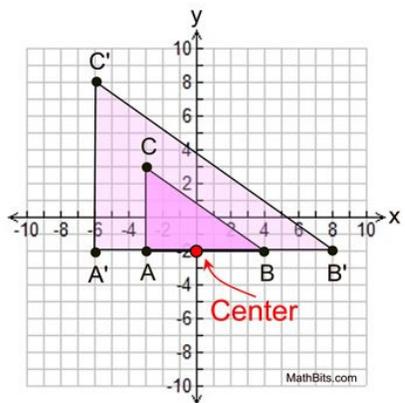
a) -3

b) 1/3

c) 3

d) 2

12.



What is the scale factor being used in the dilation?

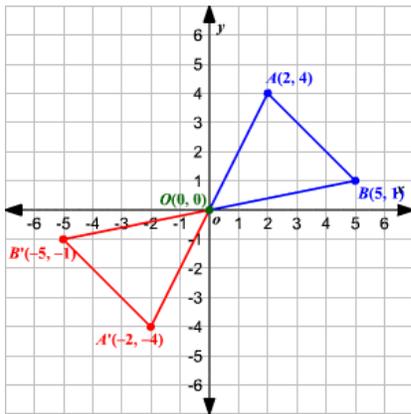
a) 2

b) 1/2

c) -2

d) 3

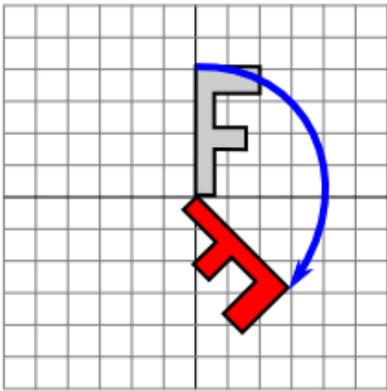
13.



Which transformation is being demonstrated? [more than one answer!]

- a) Dilation with scale factor -1
- b) Rotation by 180 degrees
- c) Reflection over y-axis
- d) Translation 10 units to the left

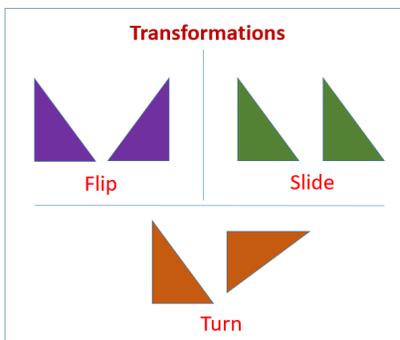
14.



In the rotation demonstrated, what is the approximate directions provided?

- a) Rotate F, 90 degrees clockwise
- b) Rotate F, 90 degrees counter-clockwise
- c) Rotate F, 135 degrees clockwise
- d) Rotate F, 135 degrees counter-clockwise

15.

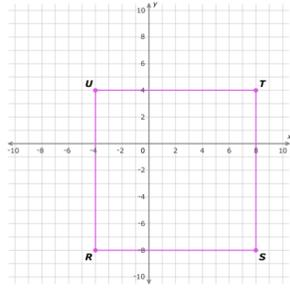


What are the mathematical terms for the transformations represented in this image?

- a) Rotation
- b) Translation
- c) Dilation
- d) Reflection
- e) Shift

16.

Graph the image of square $RSTU$ after a dilation with a scale factor of $\frac{1}{4}$, centered at the origin.



If you dilate the image using a scale factor of $\frac{1}{4}$, what will the coordinate of T' be?

a) $T'(8,4)$

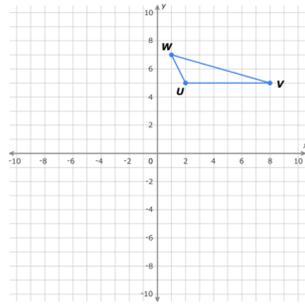
b) $T'(2,1)$

c) $T'(-2,-1)$

d) $T'(32,16)$

17.

Graph the image of $\triangle WUV$ after a rotation 180° counterclockwise around the origin.



Rotate Triangle WUV 90° degrees counter-clockwise to determine which of the following coordinates are correct {3 answers}

a) $W'(-7,1)$

b) $W'(-1,7)$

c) $U'(-2,5)$

d) $U'(-5,2)$

e) $V'(-5,8)$