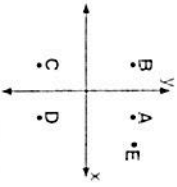


Name: \_\_\_\_\_  
Mrs. Rounbos

Date: \_\_\_\_\_  
8R Period \_\_\_\_\_

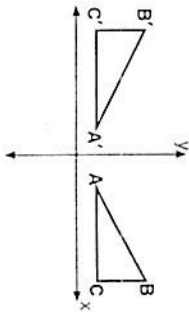
**Extra Review**  
Transformation Quiz Review

- 1) In the accompanying diagram, what point may be the image of point A after a line reflection in the x-axis?



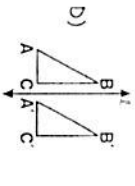
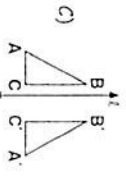
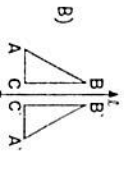
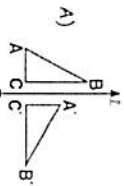
- A) E  
B) B  
C) C  
D) D

- 3) In the accompanying diagram,  $\triangle A'B'C'$  is the image of  $\triangle ABC$ .



- What type of transformation is shown?  
A) rotation  
B) translation  
C) dilation  
D) reflection

- 4) In which one of the following figures is  $\triangle A'B'C'$  a reflection of  $\triangle ABC$  in line  $l$ ?



- 5) The three vertices of  $\triangle ABC$  are in Quadrant I. If  $\triangle ABC$  is reflected in the x-axis, its image will lie in Quadrant
- A) I  
B) II  
C) III  
D) IV

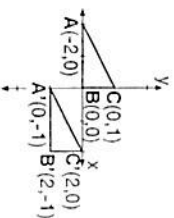
- 6) What are the coordinates of  $A'$ , the image of  $A(2,3)$  after a reflection in the x-axis?

- 7) What are the coordinates of  $A'$ , the image of point  $A(-5,1)$  after a reflection in the y-axis?

- 8) What are the coordinates of  $N'$ , the image of  $N(5,-3)$  under a reflection in the y-axis?

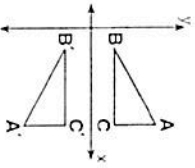
- 9) What is the image of the point  $(-3,2)$  when it is reflected in the x-axis?

- 10) In the accompanying diagram,  $\triangle A'B'C'$  is the image of  $\triangle ABC$ .



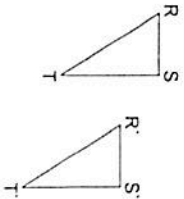
- What type of transformation is represented by  $\triangle A'B'C'$ ?
- A) dilation  
B) translation  
C) reflection  
D) rotation

- 2) In the accompanying diagram, what type of transformation makes  $\triangle A'B'C'$  the image of  $\triangle ABC$ ?



- A) reflection in the x-axis  
B) rotation centered at the origin  
C) dilation  
D) translation

11) In the accompanying diagram,  $\triangle R'S'T'$  is the image of  $\triangle RST$ .

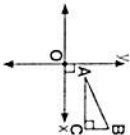


What type of transformation is shown in this diagram?  
 A) rotation  
 B) dilation  
 C) reflection  
 D) translation

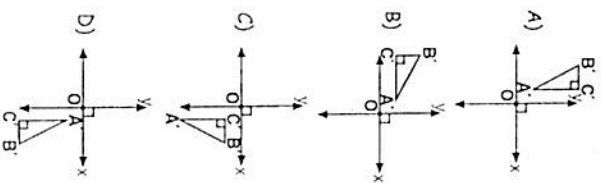
14) If the letter **P** is rotated 180 degrees, which of the following is the resulting figure?

- A) **P**  
 B) **Q**  
 C) **D**  
 D) **b**

15) In the accompanying diagram,  $\triangle ABC$  is a right triangle.



Which one of the following diagrams represents the image of  $\triangle ABC$  when rotated  $90^\circ$  counterclockwise about the origin?



16) Under what type of transformation can the image be a different size than the original figure?

- A) translation  
 B) rotation  
 C) dilation  
 D) reflection

17) What type of transformation is represented by the illustration?



- A) dilation  
 B) reflection  
 C) translation  
 D) rotation

20) Find the image of (3,-2) under the dilation  $D_2$ .

- A) H  
 B) T  
 C) A  
 D) X

21) Which one of the following letters has both vertical and horizontal line symmetry?

- A) H  
 B) D  
 C) A  
 D) F

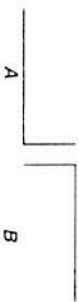
22) Which one of the following letters has only horizontal line symmetry?

- A) S  
 B) P  
 C) T  
 D) E

23) Which one of the following letters has vertical line symmetry?

- A) E  
 B) X  
 C) O  
 D) Y

13) In the diagram below, figure  $B$  is the image of figure  $A$  under what type of transformation?



- A) rotation  
 B) line reflection  
 C) translation  
 D) dilation

12) A rotation of a figure can be considered  
 A) an enlargement or a reduction of the figure  
 B) a slide of the figure  
 C) a mirror image of the figure  
 D) a turning of the figure about some fixed point

18) The *best* description of a dilation of a figure is

- A) a slide of the figure  
 B) a turning of the figure about some fixed point  
 C) an enlargement or a reduction of the figure  
 D) a mirror image of the figure

19) If point  $R'$  (6,3) is the image of point  $R$ (2,1) under a dilation with respect to the origin, what is the constant of the dilation?

- A) 2  
 B) 6  
 C) 3  
 D) 1

24) Which one of the following letters has horizontal but *not* vertical symmetry?

- A) E  
 B) X  
 C) O  
 D) Y

- 25) Which one of the following letters has point symmetry?  
 A) E  
 B) H  
 C) T  
 D) C

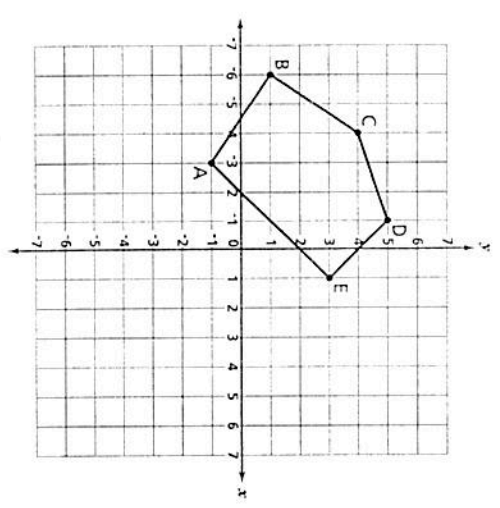
- 26) Which one of the following letters has both point and line symmetry?  
 A) M  
 B) A  
 C) S  
 D) H

- 27) What type of symmetry does the letter D have?  
 A) line symmetry, only  
 B) point symmetry, only  
 C) neither point nor line symmetry  
 D) both point and line symmetry

- 28) What is the total number of lines of symmetry for the letter A?  
 A) 3  
 B) 2  
 C) 1  
 D) 0

29

Pentagon ABCDE is drawn on the grid below.



On the grid, draw a translation of pentagon ABCDE five units down.

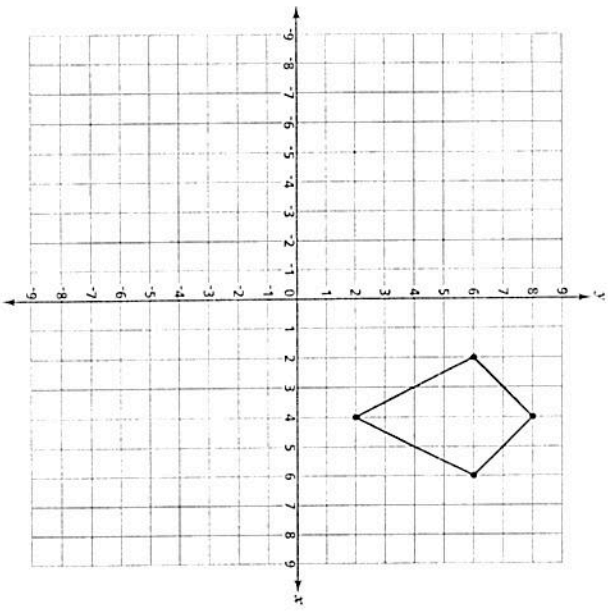
- Be sure to
- draw the translated shape
  - label the translated pentagon A'B'C'D'E'

What are the coordinates for point A'?

Answer ( , )

30

Melissa drew the shape on the grid shown below. Draw the reflection of this shape in the  $x$ -axis. Label the coordinates of each point on the new figure.



On the lines below, explain how you determined the reflection of the shape.

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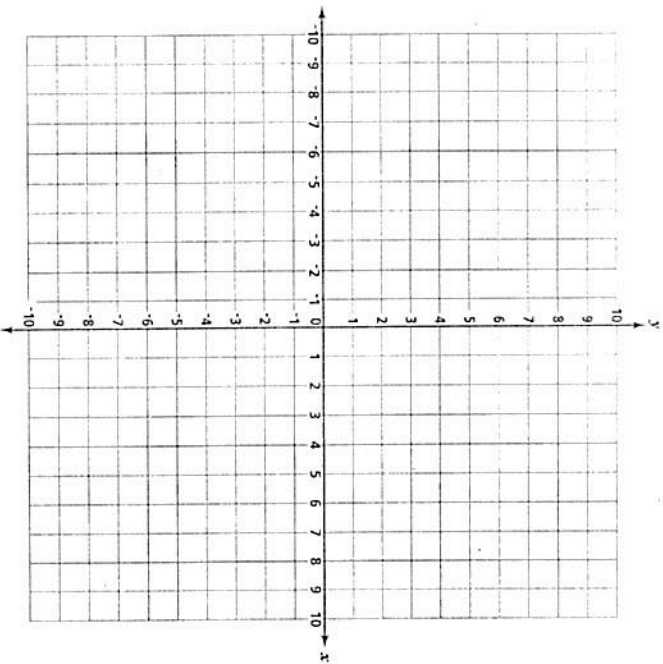
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31

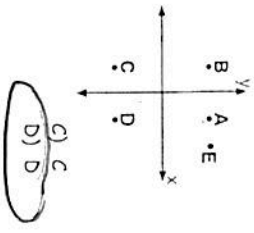
ARST has vertices  $R(2,2)$ ,  $S(4,5)$ , and  $T(4,2)$ . On the grid below, draw triangle RST and triangle R'S'T' a dilation of 2.



GO ON

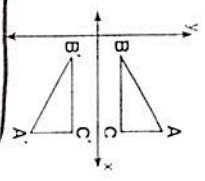
Transformation Quiz Review

1) In the accompanying diagram, what point may be the image of point A after a line reflection in the x-axis?



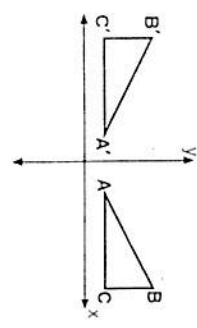
- A) E
- B) B

2) In the accompanying diagram, what type of transformation makes  $\triangle A'B'C'$  the image of  $\triangle ABC$ ?



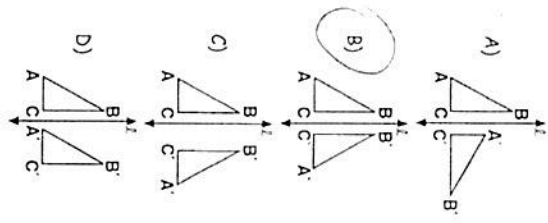
- A) reflection in the x-axis
- B) rotation centered at the origin
- C) dilation
- D) translation

3) In the accompanying diagram,  $\triangle A'B'C'$  is the image of  $\triangle ABC$ .



- What type of transformation is shown?
- A) rotation
  - B) translation

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- A) I
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6) What are the coordinates of  $A'$ , the image of  $A(2,3)$  after a reflection in the x-axis?

$A'(2, -3)$

7) What are the coordinates of  $A'$ , the image of point  $A(-5,1)$  after a reflection in the y-axis?

$A'(5,1)$

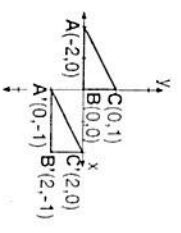
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$N'(-5, -3)$

9) What is the image of the point  $(-3,2)$  when it is reflected in the x-axis?

$(-3, -2)$

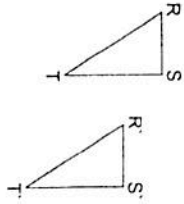
10) In the accompanying diagram,  $\triangle A'B'C'$  is the image of  $\triangle ABC$ .



What type of transformation is represented by  $\triangle A'B'C'$ ?

- A) dilation
- B) translation
- C) reflection
- D) rotation

- 11) In the accompanying diagram,  $\triangle R'S'T'$  is the image of  $\triangle RST$ .

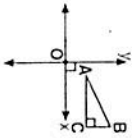


- What type of transformation is shown in this diagram?  
 A) rotation  
 B) dilation  
 C) reflection  
 D) translation

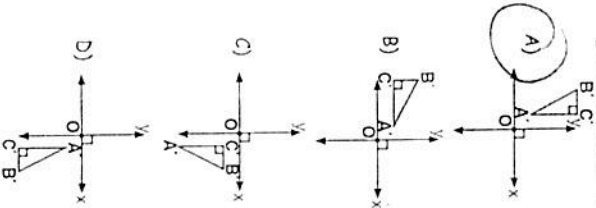
- 14) If the letter P is rotated 180 degrees,

- which of the following is the resulting figure?  
 A)   
 B)   
 C)   
 D) 

- 15) In the accompanying diagram,  $\triangle ABC$  is a right triangle.



Which one of the following diagrams represents the image of  $\triangle ABC$  when rotated  $90^\circ$  counterclockwise about the origin?



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- 19) If point  $R'(6,3)$  is the image of point  $R(2,1)$  under a dilation with respect to the origin, what is the constant of the dilation?

- A) 2  
 B) 6  
 C) 3  
 D) 1

$R(2,1) \xrightarrow{D^2} R'(6,3)$

- 20) Find the image of  $(3,-2)$  under the dilation  $D_2$ .

$(6,-4)$

- 21) Which one of the following letters has both vertical and horizontal line symmetry?

- A)   
 B)   
 C)   
 D) 

- 22) Which one of the following letters has only horizontal line symmetry?

- A)   
 B)   
 C)   
 D) 

- 23) Which one of the following letters has vertical line symmetry?

- A)   
 B)   
 C)   
 D) 

- 24) Which one of the following letters has horizontal but not vertical symmetry?

- A)   
 B)   
 C)   
 D) 

25) Which one of the following letters has point symmetry?

- A) E
- B) H
- C) T
- D) C

26) Which one of the following letters has both point and line symmetry?

- A) M
- B) A
- C) S
- D) H

27) What type of symmetry does the letter D have?

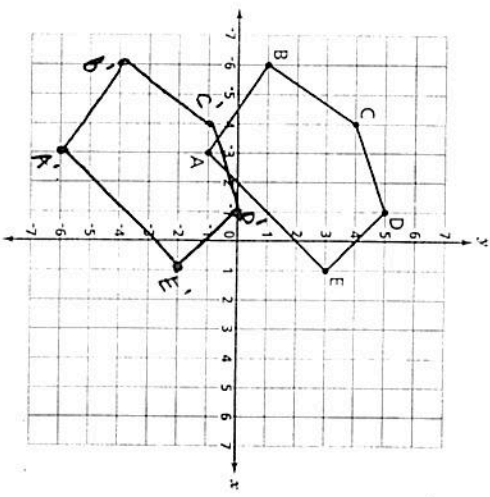
- A) line symmetry, only
- B) point symmetry, only
- C) neither point nor line symmetry
- D) both point and line symmetry

28) What is the total number of lines of symmetry for the letter A?

- A) 3
- C) 1
- B) 2
- D) 0

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Pentagon ABCDE is drawn on the grid below.



On the grid, draw a translation of pentagon ABCDE five units down.

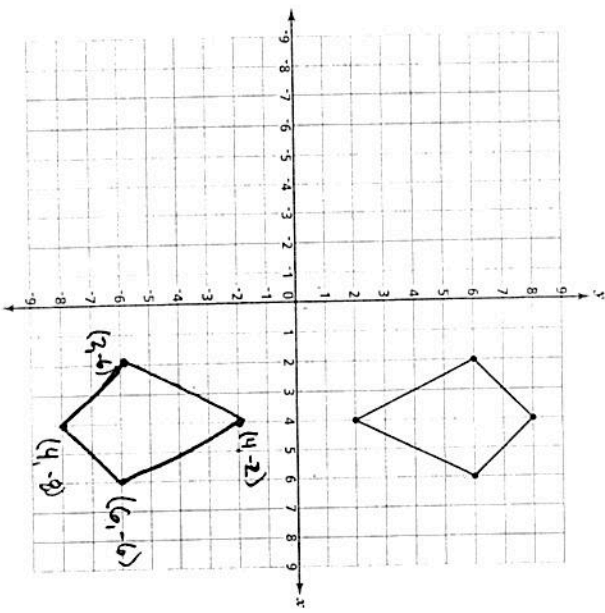
- Be sure to
- draw the translated shape
  - label the translated pentagon A'B'C'D'E'

What are the coordinates for point A'?

Answer (2, -4)

30

Melissa drew the shape on the grid shown below. Draw the reflection of this shape in the x-axis. Label the coordinates of each point on the new figure.



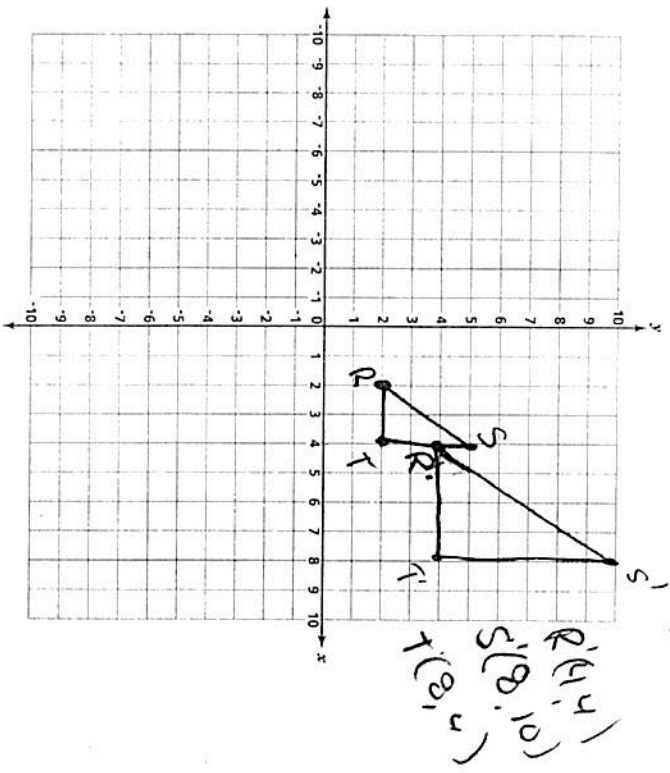
On the lines below, explain how you determined the reflection of the shape.

Rule: When reflecting over x change the y-coordinate

Conj: I can't find # of spaces the original was above the x-axis + ... Partly moved the sign # of spaces below the x since that is the reflection line (half way line)

31

ARST has vertices  $R(2,2)$ ,  $S(4,5)$ , and  $T(4,2)$ . On the grid below, draw triangle RST and triangle R'S'T' a dilation of 2.



Go On