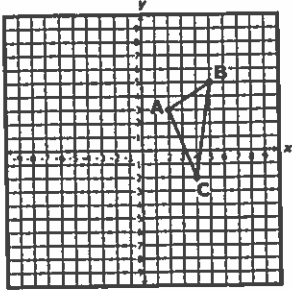


# HW# 2.6

Name: \_\_\_\_\_

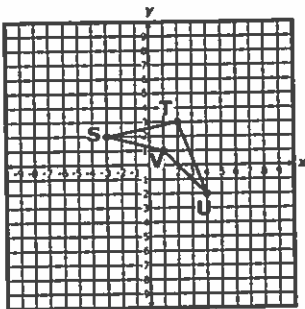
- 1  $\triangle ABC$  is located on a coordinate plane.



If the triangle is transformed following the rule  $(x, y) \rightarrow (-x, y)$ , what transformation is modeled?

- A Dilation                      C Translation  
B Reflection                    D Rotation

- 2 Quadrilateral STUV is located on a coordinate plane.



If the quadrilateral is transformed following the rule  $(x, y) \rightarrow (-x, -y)$ , what transformation is modeled?

- A Dilation                      C Translation  
B Reflection                    D Rotation

- 3 Rectangle MNOP is located on a coordinate plane. If the rectangle is dilated following the rule  $(x, y) \rightarrow (2x, 2y)$ , what type of dilation is formed?

- A Reduction  
B Enlargement  
C Congruent  
D Not enough information to decide

4. A figure has vertices at  $R(-2, -3)$ ,  $S(0, 2)$  and  $T(2, -3)$ . After a transformation, the image of the figure has vertices at  $R'(-6, -9)$ ,  $S'(0, 6)$  and  $T'(6, -9)$ . What transformation is modeled?

- A Dilation  
B Reflection  
C Translation  
D Rotation

Write the Rule: \_\_\_\_\_

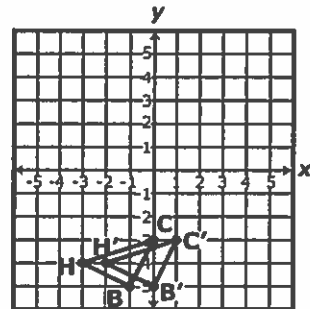
- 5) A figure has vertices at  $X(3, -3)$ ,  $Y(1, -2)$  and  $Z(3, 0)$ . After the transformation, the image of the figure has vertices at  $X'(-3, -3)$ ,  $Y'(-1, -2)$  and  $Z'(-3, 0)$ . What transformation is modeled?

- A Dilation  
B Reflection  
C Translation  
D Rotation

- 6) A figure has vertices at  $D(-2, 1)$ ,  $E(-3, 3)$  and  $F(0, 3)$ . After a transformation, the image of the figure has vertices at  $D'(-1, -2)$ ,  $E'(-3, -3)$  and  $F'(-3, 0)$ . What transformation is modeled?

- A Dilation  
B Reflection  
C Translation  
D Rotation

- 7)  $\triangle BCH$  is mapped to  $\triangle B'C'H'$ .

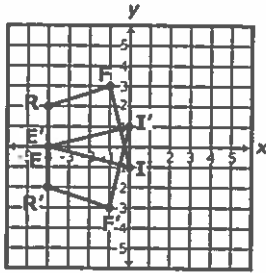


This transformation preserves congruence because:

- A It is a translation following the rule  $(x, y) \rightarrow (x + 1, y)$ .  
B It is a translation following the rule  $(x, y) \rightarrow (x, y + 1)$ .  
C It is a rotation following the rule  $(x, y) \rightarrow (x, -y)$ .  
D It is a rotation following the rule  $(x, y) \rightarrow (-x, y)$ .

8.)

Quadrilateral ERFI is mapped to Quadrilateral E'R'F'I'.

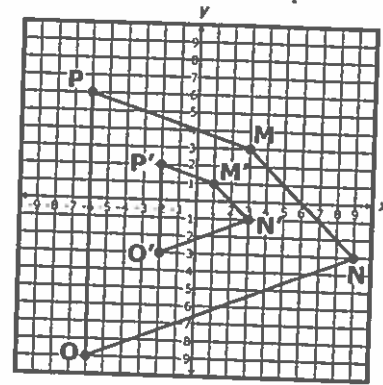


This transformation preserves congruence because:

- A It is a translation following the rule  $(x, y) \rightarrow (x, y - 2)$ ?
- B It is a translation following the rule  $(x, y) \rightarrow (x - 2, y)$ ?
- C It is a reflection following the rule  $(x, y) \rightarrow (x, -y)$ ?
- D It is a reflection following the rule  $(x, y) \rightarrow (-x, y)$ ?

9.)

Quadrilateral MNOP is similar to Quadrilateral M'N'O'P'.

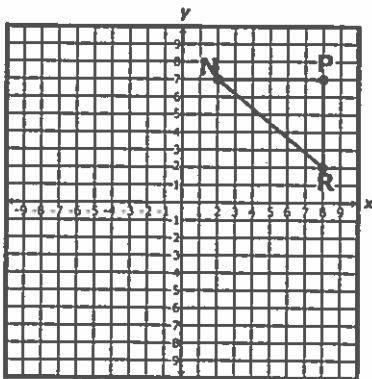


This transformation does not preserve congruence because:

- A It is a dilation following the rule  $(x, y) \rightarrow (3x, 3y)$ ?
- B It is a dilation following the rule  $(x, y) \rightarrow (\frac{1}{3}x, \frac{1}{3}y)$ ?
- C It is a reflection following the rule  $(x, y) \rightarrow (3x, y)$ ?
- D It is a reflection following the rule  $(x, y) \rightarrow (x, 3y)$ ?

10.)

$\triangle NPR$  is located on the coordinate plane.

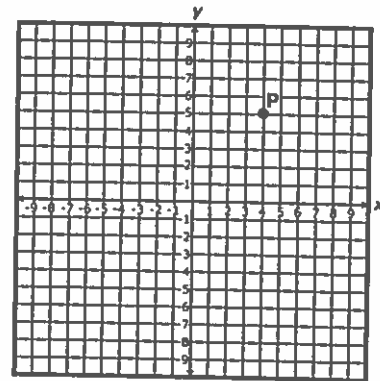


Which transformation is represented the coordinates for P' are (8, -7)?

- A A reflection across the x-axis
- B A reflection across the y-axis
- C A translation 8 units right and 14 units up
- D A translation 4 units up and 7 units right

11.)

Point P is graphed at (4, 5) shown on the grid below. Point P is 90° clockwise to Point P'.



What are the coordinates of P'?

- A (-5, 4)
- B (-4, 5)
- C (5, -4)
- D (-4, -5)