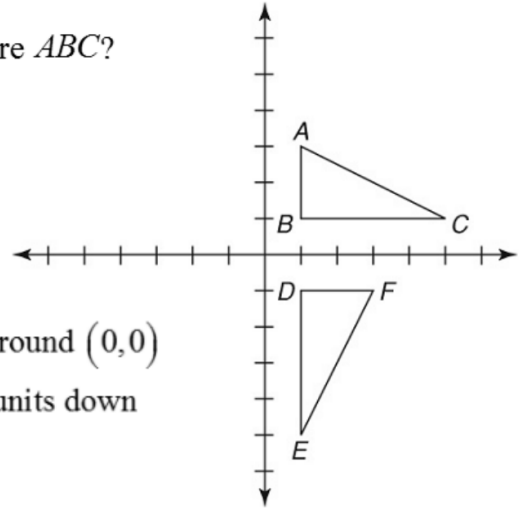


Name

Spiral Review 17

Directions: Show your work for credit. Use your notes and textbook for support

1. How has figure DEF been transformed to form figure ABC ?



- a. reflection across x -axis
- b. 180° rotation around $(0,0)$
- c. 90° rotation around $(0,0)$
- d. translation 2 units down

2. Point A has coordinates $(6, 4)$. What are the coordinates of A' , the image of A under a dilation centered at the origin with a scale factor of $\frac{1}{2}$ followed by the translation $(x, y) \rightarrow (x - 2, y - 2)$?

Show your work

- A** $(2, 1)$
- B** $(3, 2)$
- C** $(5, 4)$
- D** $(1, 0)$

3. Which of the following equations has exactly one solution?

- a. $-7x + 2 = -3(x - 3) - 4x - 7$
- b. $14x = 7(2x + 2)$
- c. $5x + 3 = -2(2x + 3)$
- d. $3(4x + 2) - 9 = 12x - 3$

Show your work



4. What is the solution of the linear system?

$$\begin{aligned}3x - 2y &= 1 \\ -x + 4y &= -27\end{aligned}$$

a. $(-9, -9)$

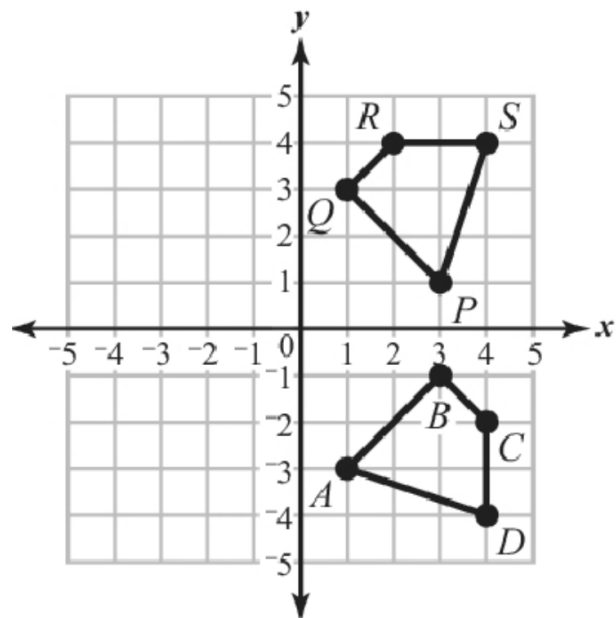
c. $(-13, -10)$

b. $(-7, -10)$

d. $(-5, -8)$

Show your work

5. The quadrilateral $ABCD$ is rotated 90 degrees counterclockwise about the origin to form quadrilateral $PQRS$.



Which statement is true for the quadrilaterals?

A Angle PQR is congruent to angle BAD .

B Quadrilateral $PQRS$ is congruent to quadrilateral $ABCD$.

C The lengths of the sides of quadrilateral $ABCD$ are longer than the lengths of the corresponding sides of quadrilateral $PQRS$.

D The lengths of the sides of quadrilateral $ABCD$ are shorter than the lengths of the corresponding sides of quadrilateral $PQRS$.