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Teacher
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Unit 2 Test REVIEW

Transformations

1. **Name the three transformations that are an isometry (keep same size and shape). Name the one transformation that is not an isometry.**

_____, _____

_____.

NOT? _____

2. **Write the algebraic representations that correctly describes a reflection over the y-axis.**

(x , y) → (,)

Over x-axis? (x , y) →(,)

3. **What is the ordered pair rule for a translation 5 units right and 3 units down?**

$(x, y) \rightarrow (x \quad , y \quad)$

4. **Describe the graph below with regard to the rotation shown.**

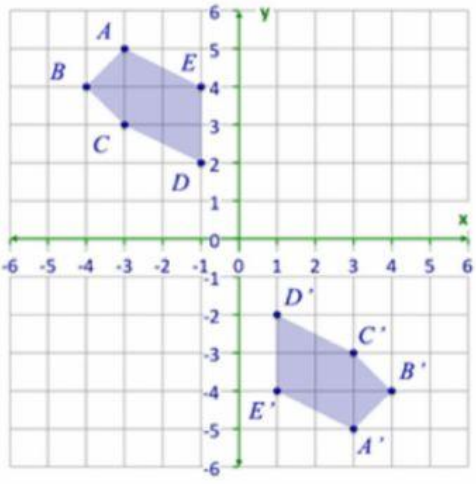

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Figure 1 is for questions 5, 6, and 6

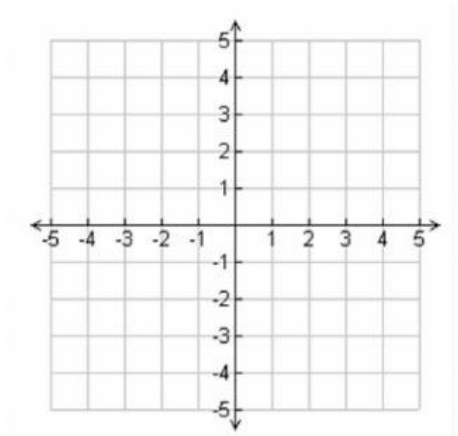

Figure $ABCD$ is graphed with vertices $A(7,3)$, $B(4,5)$, $C(3,4)$ and $D(4,2)$.

5. **The image of $ABCD$ is under a rotation of $180°$ about the origin. What is the ordered pair for B'?**

6. **The image of $ABCD$ is under a rotation of $270°$ clockwise about the origin. What is the ordered pair for A'?**

7. **The image of $ABCD$ is under a reflection over the x-axis. What is the ordered pair for C' ?**

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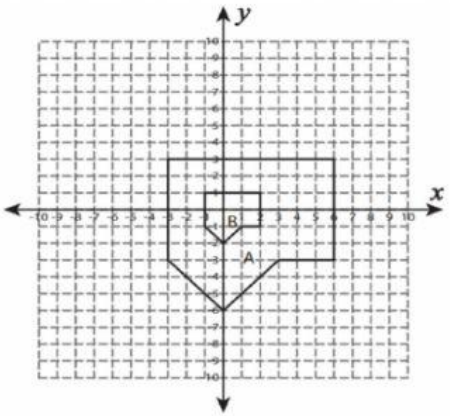
8. **Figure A is a dilation of figure B. What is the scale factor?**



Scale factor = _____

9. **Find the image of $(-8, 20)$ with a translation of 5 units right and 2 units down.**

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Transformations

12. Circle the letter of the following statements that are true:

a. Dilations create similar figures if the scale factor is not 1.

b. Dilations preserve angle measure.

c. Dilations can create larger figures or smaller figures.

d. Dilations produce congruent figures if the scale factor is greater than 1.

13. **Which algebraic representation correctly describes a reflection over the x-axis?**

a. $(x,\ y) \rightarrow (-x,\ y)$

b. $(x,\ y) \rightarrow (-x, -y)$

c. $(x,\ y) \rightarrow (x, -y)$

d. $(x,\ y) \rightarrow (-y,\ x$