

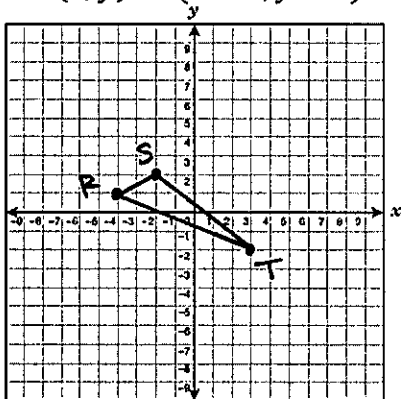
Name:

Date:

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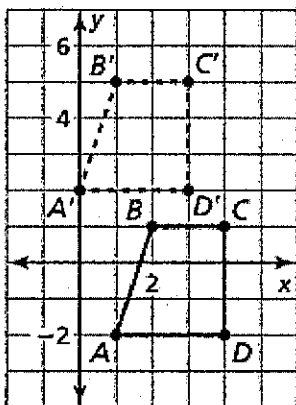
OPTIONAL TEST PRACTICE

- Graph $\triangle RST$ with vertices $R(-4, 1)$, $S(-2, 2)$ and $T(3, -2)$ and its image after the translation:
 $(x, y) \rightarrow (x + 2, y - 2)$



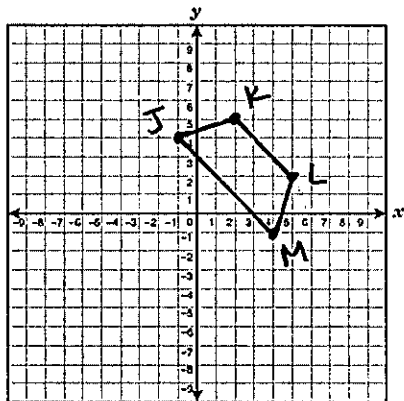
- Write a rule for the translation from quadrilateral ABCD to quadrilateral $A'B'C'D'$ in both formats (coordinate rule and vector rule).

Coordinate Rule:



Vector Rule:

- Graph quadrilateral JKLM with coordinates $J(-1, 4)$, $K(2, 5)$, $L(5, 2)$ and $M(4, -1)$ in the line $x = 3$.

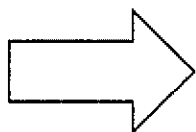


- Determine whether the figure has line symmetry. If so, draw ALL lines of symmetry on the figure.

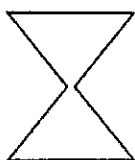
a.



b.



c.

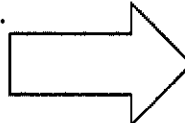


- Determine whether the figure has rotational symmetry. If so, determine ALL angles of rotational symmetry that will map the figure onto itself.

a.



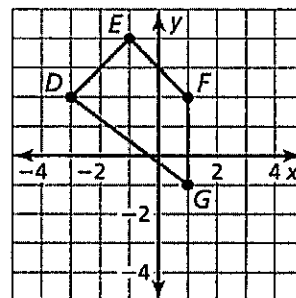
b.



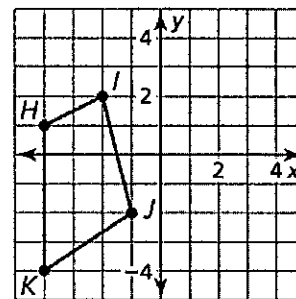
c.



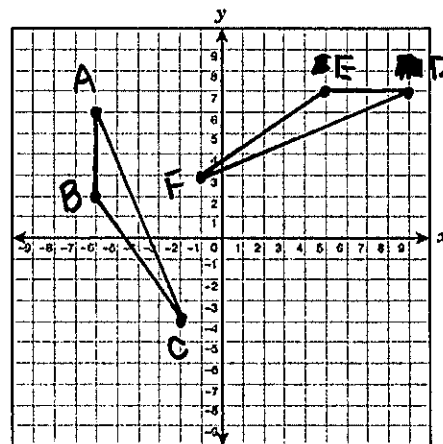
- Graph quadrilateral HIJK and its image after a rotation of 180° about the origin.



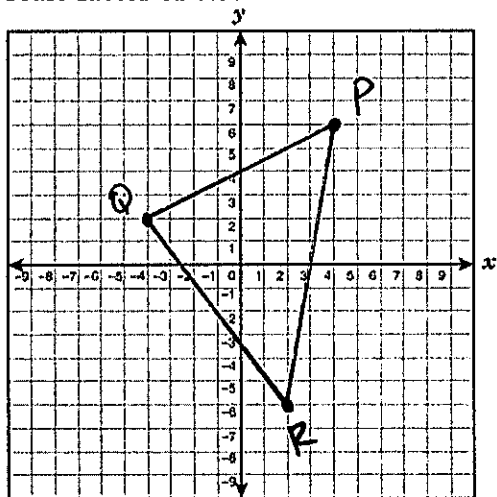
- Graph quadrilateral DEFG and its image after a rotation of 90° clockwise about the origin.



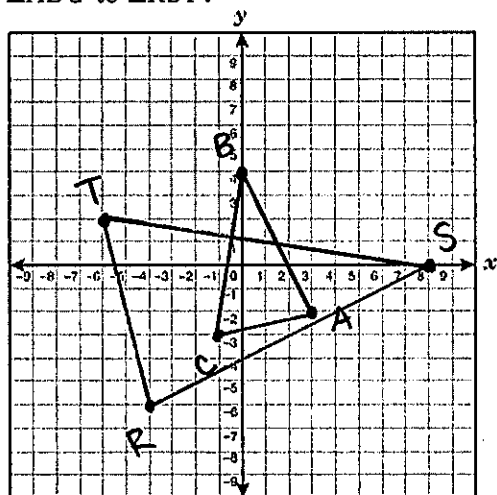
- Determine whether the polygons are congruent. If so, write a composition of transformations that maps $\triangle ABC$ to $\triangle DEF$.



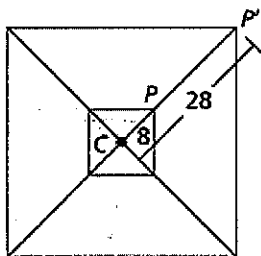
9. Graph $\triangle PQR$ and its image after a dilation with scale factor of 0.5.



10. Describe a similarity transformation that maps $\triangle ABC$ to $\triangle RST$.



11. Find the scale factor of the dilation. Then tell whether the dilation is a reduction or an enlargement. Explain using the value of the scale factor.



12. A magnifying glass shows the image of an object that is 7 times the object's actual size. Determine the length of the image of the object if the actual length of the object is 3.5 millimeters.

13. A _____° rotation clockwise is the same as a 90° rotation counterclockwise.

14. A _____° rotation clockwise is the same as a 180° rotation counterclockwise.

15. A _____° rotation clockwise is the same as a 270° rotation counterclockwise.

16. Performing two reflections in parallel lines results in the transformation (circle one):

Rotation	Translation
Dilation	Reflection

17. Performing two reflections in intersecting lines results in the transformation (circle one):

Rotation	Translation
Dilation	Reflection

18. Name ALL transformations that are rigid motions:

19. Name ALL transformations that are nonrigid motions: