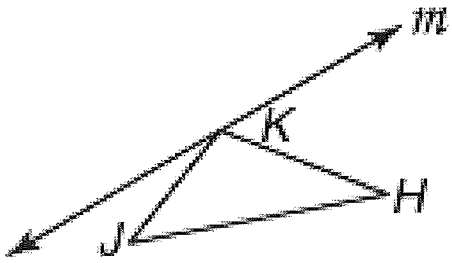
Geometry
Practice 9-1

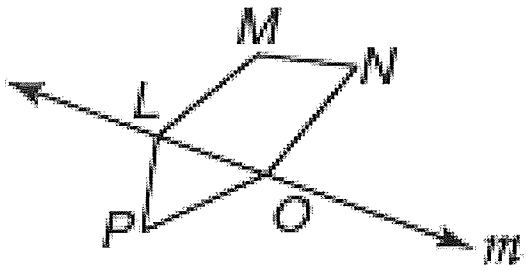
Name_____
Hour_____

Draw the image of each figure under a reflection in line m.

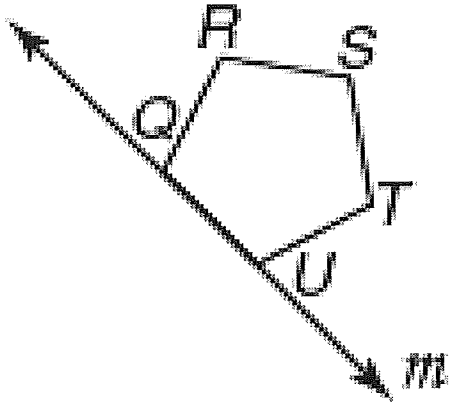
1.



2.



3.



a). Write the rule for each reflection.
b). Without graphing, find the points of the image under the given reflection.

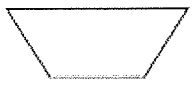
27. $\overline{DJ}$ with endpoints $D(4, 4)$ and $J(-3, 2)$ in the y-axis

30. quadrilateral $GHIJ$ with vertices $G(-2, -2)$, $H(2, 0)$, $I(3, 3)$, and $J(-2, 4)$ in the origin

25. $\overline{AB}$ with endpoints $A(2, 4)$ and $B(-3, -3)$ in the x-axis

31. $\triangle ABC$ with vertices $A(-3, -1)$, $B(0, 2)$, and $C(3, -2)$ in the line $y = x$

Determine how many lines of symmetry each figure has. Then determine whether the figure has point symmetry.

7. 

8. 

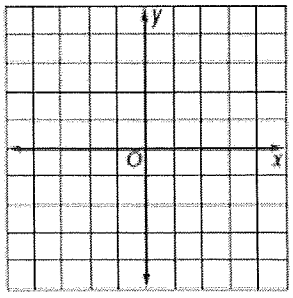
9. 

Graph each figure and its image under the given reflection.

10. Rule:_____

A'_____ **B'**_____ **C'**_____ **D'**_____

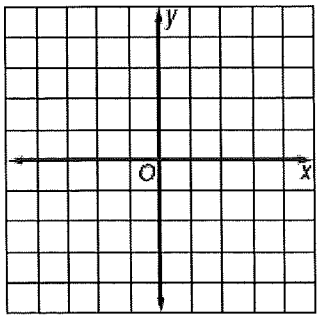
quadrilateral $ABCD$ with vertices $A(-3, 3)$, $B(1, 4)$, $C(4, 0)$, and $D(-3, -3)$ in the origin



11. Rule:_____

F'_____ **G'**_____ **H'**_____

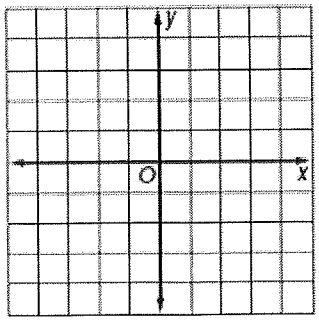
$\triangle FGH$ with vertices $F(-3, -1)$, $G(0, 4)$, and $H(3, -1)$ in the line $y = x$



12. **Rule:**_____

Q'_____ R'_____ S'_____ T'_____

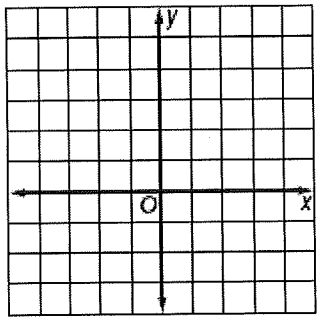
rectangle $QRST$ with vertices $Q(-3, 2)$, $R(-1, 4)$, $S(2, 1)$, and $T(0, -1)$ in the x-axis



13. **Rule:**_____

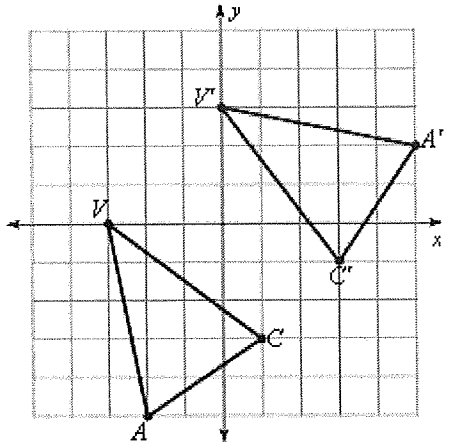
H'_____ I'_____ J'_____ K'_____

trapezoid $HIJK$ with vertices $H(-2, 5)$, $I(2, 5)$, $J(-4, -1)$, and $K(-4, 3)$ in the y-axis

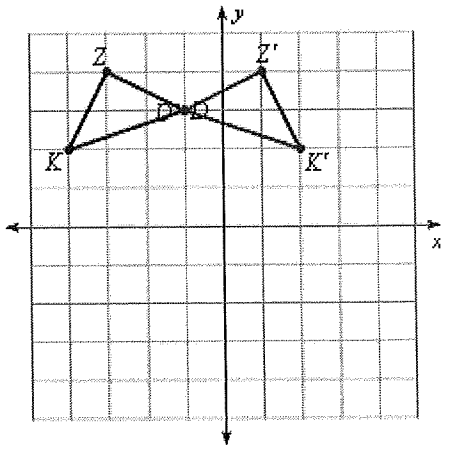


Write the rule to describe each transformation.

1)

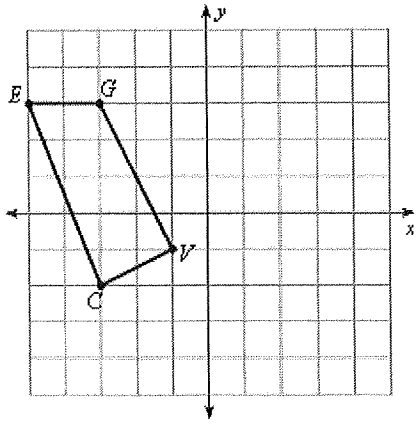


2)



Graph the image of the figure using the transformation given.

3) reflection across $x = -1$



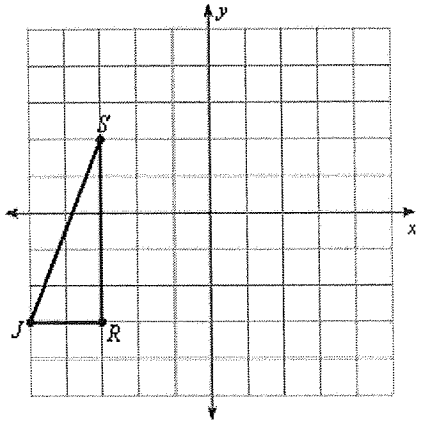
C' = _____

E' = _____

G' = _____

V' = _____

4) reflection across $y = 1$



J' = _____

S' = _____

R' = _____