

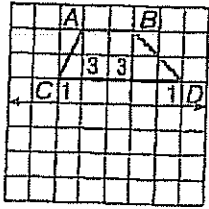
Study Guide and Intervention

Reflections # 1

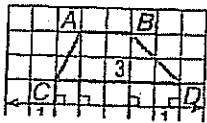
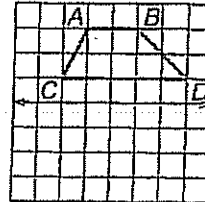
When a figure is reflected across a line, every point on the reflection is the same distance from the line of reflection as the corresponding point on the original figure. The image is congruent to the original figure, but the orientation is different from that of the original figure.

EXAMPLE

Draw the image of quadrilateral $ABCD$ after a reflection over the given line.



Step 1 Count the number of units between each vertex and the line of reflection.

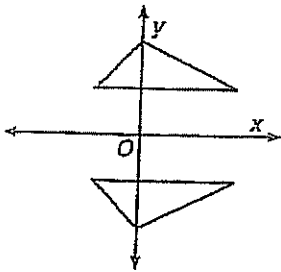


Step 2 To find the corresponding point for vertex A , move along the line through vertex A perpendicular to the line of reflection until you are 3 units from the line on the opposite side. Draw a point and label it A' . Repeat for each vertex.

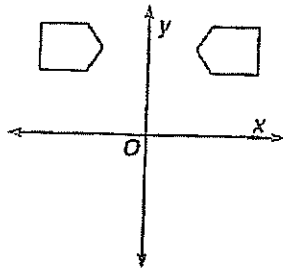
Reflections

Name the line of symmetry for each pair of figures.

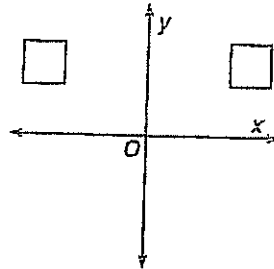
1.



2.



3.

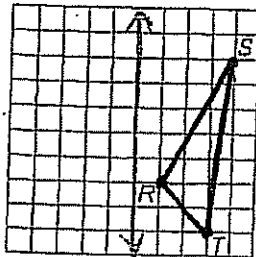


Lesson 6-7

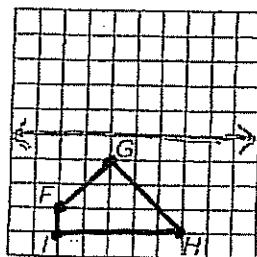
EXERCISES

Draw the image of the figure after a reflection over the given line.

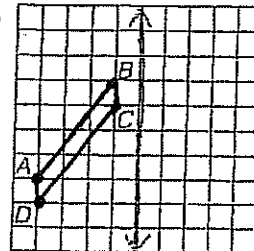
1.



2.



3.

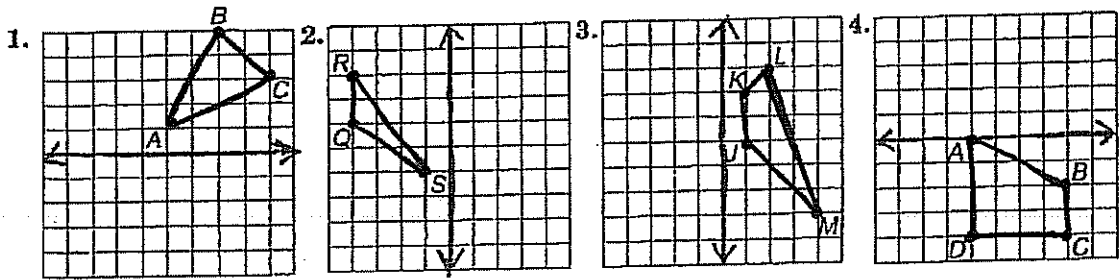


6-7

Practice: Skills

Reflections # 1

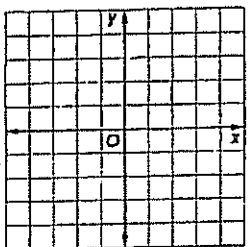
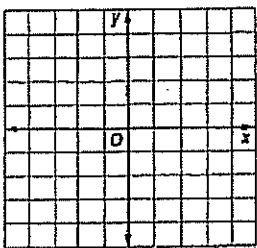
Draw the image of the figure after a reflection over the given line.



Graph the figure with the given vertices. Then graph the image of the figure after a reflection over the given axis and write the coordinates of its vertices.

- 5. triangle ABC with vertices $A(1, 4)$, $B(4, 1)$, and $C(2, 5)$; x -axis

- 6. triangle DEF with vertices $D(-1, 2)$, $E(-3, 1)$, and $F(-4, 5)$; y -axis



- 7. trapezoid $WXYZ$ with vertices $W(2, 4)$, $X(2, -2)$, $Y(4, -1)$, and $Z(4, 3)$; y -axis

- 8. rhombus $QRST$ with vertices $Q(-1, 5)$, $R(-4, 3)$, $S(-1, 1)$, and $T(2, 3)$; x -axis

