Geometry – Reflections Worksheet

Use the diagram to complete the statement. (Figure ABCD → EFGD)

1. $\overline{AB}$ → _____

2. _____ → ∠DEF
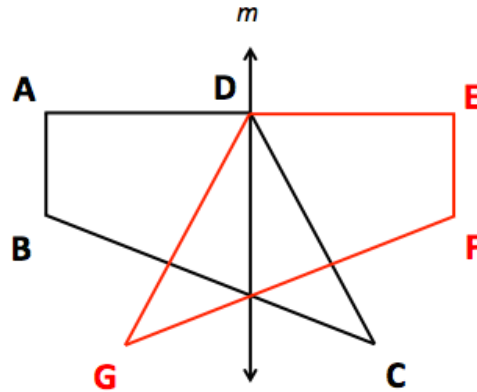
3. C → _____

4. D → _____

5. _____ → ∠GFE

6. _____ → $\overline{DG}$

Decide whether the conclusion is true or false. If false, give the correct coordinate.
(You do not have to graph, but you can if it helps.)

7. If N(2, 4) is reflected across the line y = x, then N' is (4, 2).

8. If M(6, -2) is reflected across the line x = 3, then M' is (0, -2).

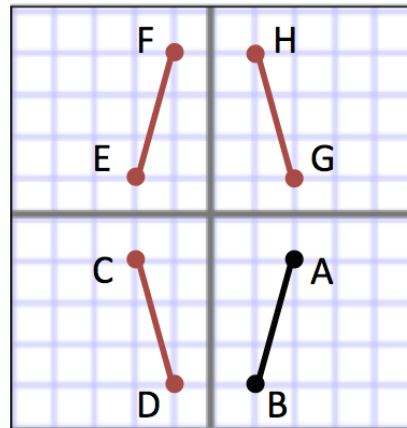9. If W(-6, -3) is reflected over the y-axis, then W' is (-6, 3).

10. If Z(2, 0) is reflected over the x-axis, then Z' is (2, 0).

Use the diagram at the right to name the image of $\overline{AB}$ after the reflection given.

11. Reflection over the x-axis.

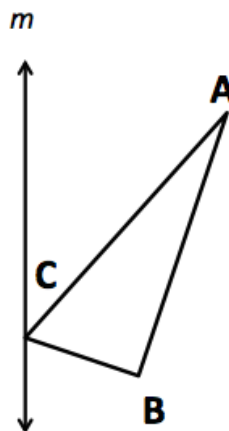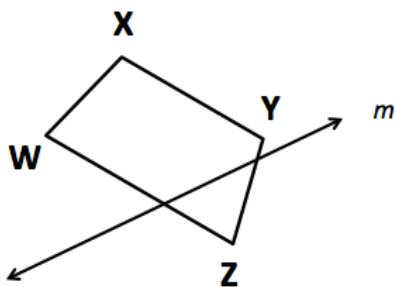12. Reflection over the y-axis.

13. Reflection over the line y = x

14. Reflection over the y-axis followed by a reflection over the x-axis.

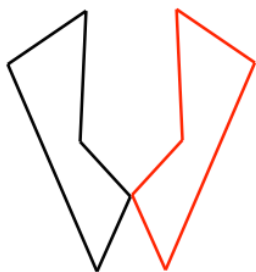**Draw the reflected image using a protractor and ruler.**

15.

16.

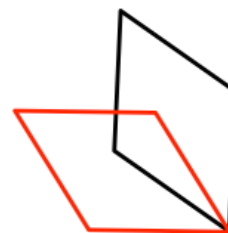**The following problems show a preimage and its reflected image. Draw the line of reflection.**

17.

18.

19.
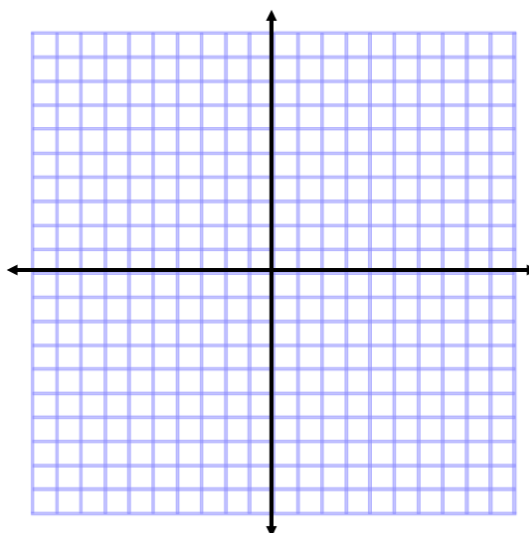
Graph each figure and its image.

20. Rectangle ABCD over the y-axis
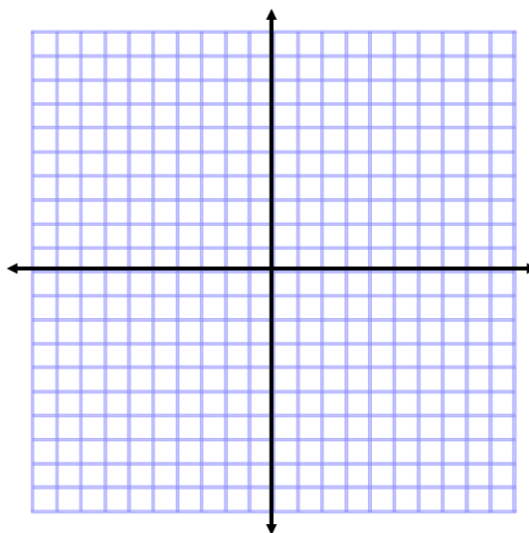
A(7, 2)

B(1, 2)

C(1, -3)

D(7, -3)

21. ΔXYZ over the line y = x

X(-3, 2)

Y(-4, -1)

Z(-6, -1)

Graph the figure and its image.
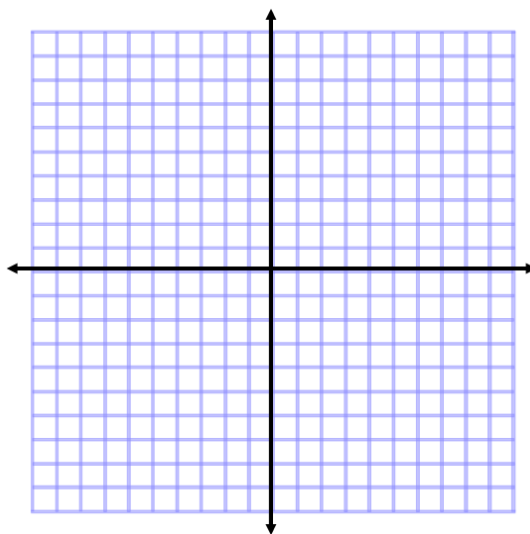
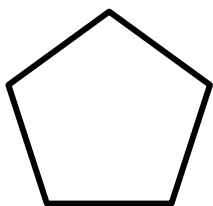22. Parallelogram JKLM over the x-axis

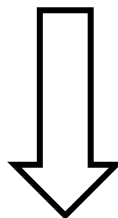   J(2, 3)

    K(7, 3)

    L(6, -1)

    M(1, -1)

State whether the figure has a line (or lines) of symmetry. If so, state how many and draw the lines.

23.

24.

___

Bonus: Graph the figure and its image.

Figure PQRS over the line y = -2

    P(-1, 4)

    Q(2, 4)

    R(1, -1)

    S(-1, -1)