Practice 1-8

The Coordinate Plane

Graph each point in the coordinate plane.

1. $A(-2, 5)$ **2.** $B(5, -2)$ **3.** $C(0, 6)$

4. $D(-4, 0)$ **5.** $E(-4, -2)$
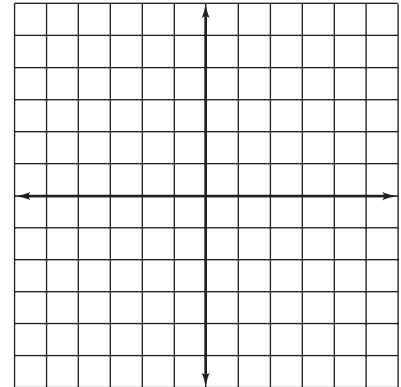
Find the distance between the points.

6. $Q(10, 10), R(10, -2)$ _____

7. $U(11, -2), V(-1, 3)$ _____

Find the coordinates of the midpoint of each segment. The coordinates of the endpoints are given.

8. $A(6, 7), B(4, 3)$ _____

9. $O(0, 0), G(-5, 12)$ _____

10. $H(2.8, 1.1), I(-3.4, 5.7)$ _____

11. The midpoint of $\overline{AB}$ is $(1, 2)$. The coordinates of A are $(-3, 6)$. Find the coordinates of B. _____

12. Graph the points $A(2, 1), B(2, -5), C(-4, -5)$, and $D(-4, 1)$. Draw the segments connecting A, B, C, and D in order. Are the lengths of the sides of $ABCD$ the same? _____

Explain. _____

13. A crow flies to a point that is 1 mile east and 20 miles south of its starting point. How far does the crow fly? _____

Quadrilateral *PQSR* has coordinates as follows:
$P(0, 0)$, $Q(-1, 4)$, $R(8, 2)$, and $S(7, 6)$.
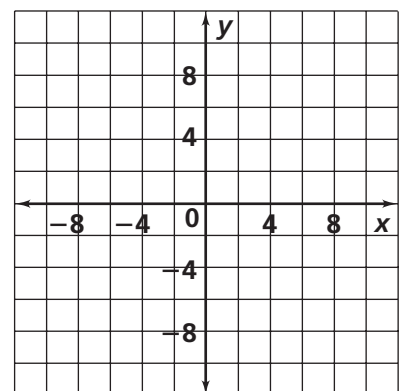
14. Graph quadrilateral *PQSR*.

15. What is the perimeter of *PQSR*? _____

16. What is the midpoint of $\overline{QR}$? _____