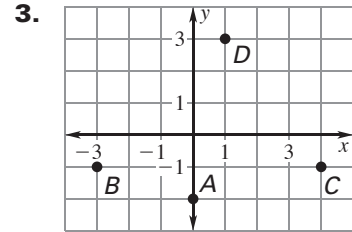Name _____   Date _____

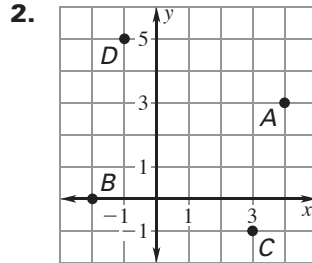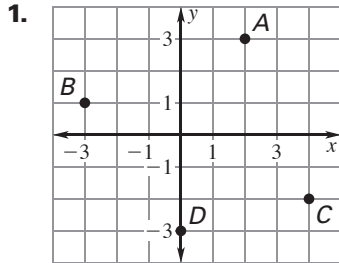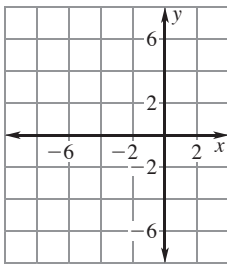**LESSON 3.1**

Practice C

For use with the lesson "Plot Points in a Coordinate Plane"

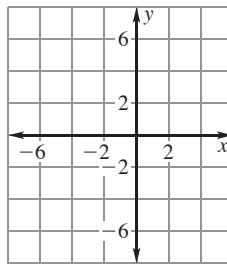## Give the coordinates of the points labeled *A, B, C*, and *D*.

1.

2.

3.

Plot the point in a coordinate plane. *Describe* the location of the point.

4. $A(-2, -5)$

5. $P(-3, 6)$
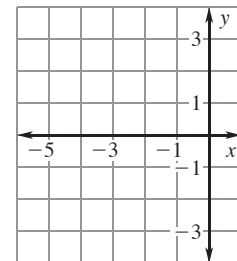

6. $Q(6, -3)$

7. $B(0, -4)$
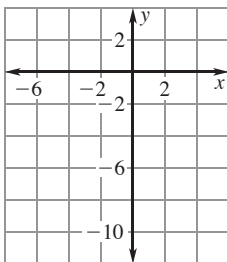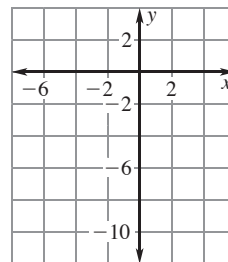

8. $W(6, 7)$

9. $X(-5, 2)$

Graph the function with the given domain. Then identify the range of the function.

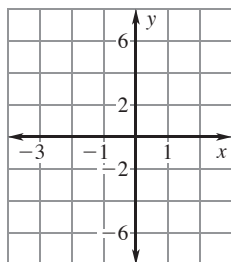**10.** $y = 3x - 4$; domain: $-2, -1, 0, 1, 2$

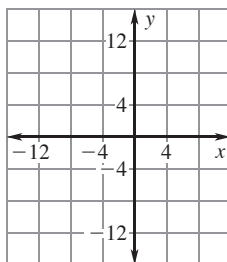**11.** $y = \frac{3}{2}x - 4$; domain: $-4, -2, 0, 2, 4$

LESSON 3.1 **Practice C** *continued*
For use with the lesson "Plot Points in a Coordinate Plane"

12. $y = -2x - 1$; domain: $-2, -1, 0, 1, 2$ **13.** $y = -\frac{3}{4}x + 3$; domain: $-8, -4, 0, 4, 8$

14. Suppose the point (a, b) lies in Quadrant II. Describe the location of the specified point. *Explain* your reasoning.
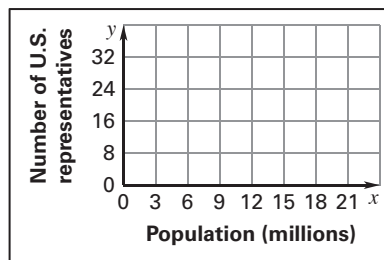
  a. (b, a) **b.** $(b, -b)$ **c.** $(-2a, 2b)$

15. **U.S. Representatives** The table shows the 2000 population (in millions) and the number of U.S. representatives for seven states.

State	CO	NC	KS	ND	TX	OK	IN
Population (millions)	4.3	8.0	2.7	0.6	20.9	3.5	6.1
Number of U.S. representatives	7	13	4	1	32	5	9

  a. Graph the data from the table.

  b. What conclusions can you draw from the graph? *Explain* your reasoning.

16. **Star Magnitude** The table shows the magnitudes, or brightnesses, of stars and their distances (in light years) from our solar system. Graph the data from the table. Does the graph represent a function? Why or why not?

Star	Sirius	Vega	Alpha Centauri	Capella	Arcturus
Magnitude	-1.46	0.03	-0.01	0.08	-0.04
Distance (light years)	8.6	25.3	74	41	34