

# 4.1 EXERCISES

## HOMework KEY

 = **WORKED-OUT SOLUTIONS**  
on p. WS1 for Exs. 15, 25, and 37

 = **TAKS PRACTICE AND REASONING**  
Exs. 13, 23, 41, 42, and 43

 = **MULTIPLE REPRESENTATIONS**  
Ex. 40

### SKILL PRACTICE

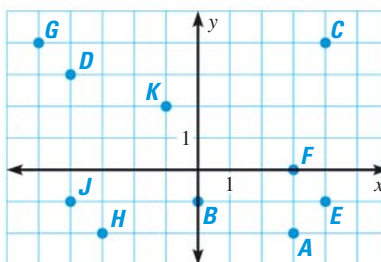
- VOCABULARY** What is the  $x$ -coordinate of the point  $(5, -3)$ ? What is the  $y$ -coordinate?
- WRITING** One of the coordinates of a point is negative while the other is positive. Can you determine the quadrant in which the point lies? *Explain.*

#### EXAMPLE 1

on p. 206  
for Exs. 3–13

**NAMING POINTS** Give the coordinates of the point.

- |         |         |
|---------|---------|
| 3. $A$  | 4. $B$  |
| 5. $C$  | 6. $D$  |
| 7. $E$  | 8. $F$  |
| 9. $G$  | 10. $H$ |
| 11. $J$ | 12. $K$ |



- TAKS REASONING** A point is located 3 units to the left of the origin and 6 units up. What are the coordinates of the point?

- Ⓐ  $(3, 6)$       Ⓑ  $(-3, 6)$       Ⓒ  $(6, 3)$       Ⓓ  $(6, -3)$


#### EXAMPLE 2

on p. 207  
for Exs. 14–22

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

- |                 |                |                 |                  |
|-----------------|----------------|-----------------|------------------|
| 14. $P(5, 5)$   | 15. $Q(-1, 5)$ | 16. $R(-3, 0)$  | 17. $S(0, 0)$    |
| 18. $T(-3, -4)$ | 19. $U(0, 6)$  | 20. $V(1.5, 4)$ | 21. $W(3, -2.5)$ |

- ERROR ANALYSIS** Describe and correct the error in describing the location of the point  $W(6, -6)$ .

Point  $W(6, -6)$  is 6 units to the left of the origin and 6 units up. 

#### EXAMPLE 3

on p. 207  
for Exs. 23–27

- TAKS REASONING** Which number is in the range of the function whose graph is shown?

- Ⓐ  $-2$       Ⓑ  $-1$   
Ⓒ  $0$       Ⓓ  $2$

