

Practice 10

For use with Section 2-1

For each function, find $f(3)$, $f(-2)$, and $f(a - b)$.

1. $f(x) = 5x + 3$

2. $f(x) = \frac{1}{2 - x}$

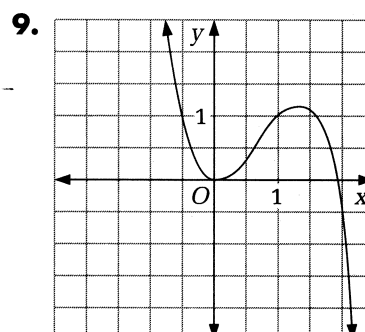
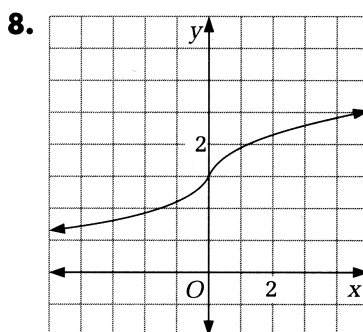
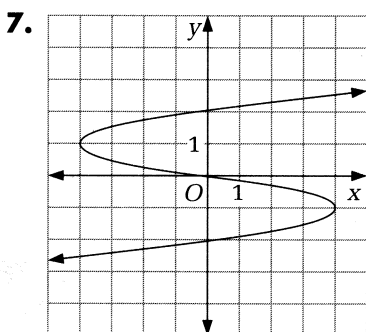
3. $f(x) = |2x - 5|$

4. $f(x) = \sqrt{x^2 + 7}$

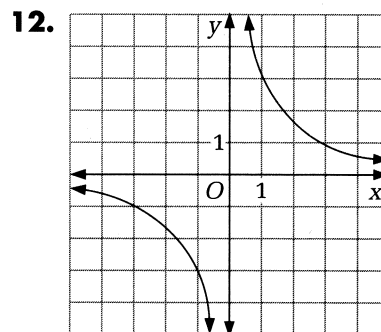
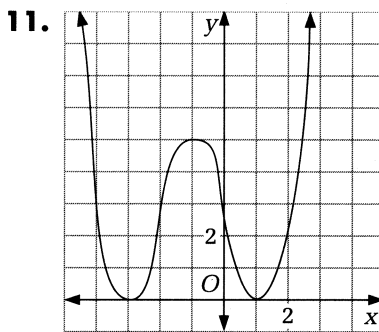
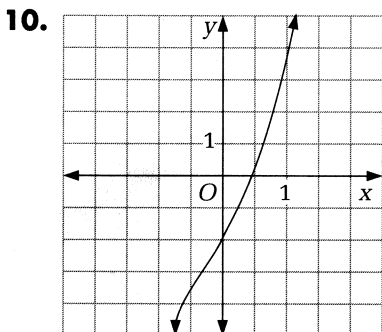
5. $f(x) = \frac{x + 3}{x^2 - 5}$

6. $f(x) = 3x^2 - \frac{x}{2}$

Tell whether each graph represents a function.



Tell whether each function is *one-to-one* or *many-to-one*.



13. Find the domain and range of the function in Exercise 3.

14. Find the domain and range of the function $y = 1 - \sqrt{x}$.

15. Suppose a parking lot has a sign like that shown, and suppose $C(t)$ is the function whose domain is amounts of time that cars are left in the parking lot and whose range is costs of parking for those amounts of time.

- a. Find the domain and range of the function $C(t)$.
- b. Find $C(\text{a half hour})$, $C(2 \text{ hours})$, and $C(3 \text{ and a half hours})$.

1 hour or less	\$2.00
2 hours or less	
(over 1 hour)	\$2.50
3 hours or less	
(over 2 hours)	\$3.00
All day (up to	
12 hours)	\$5.00