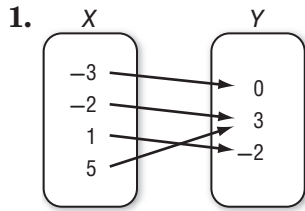


1-7 Practice

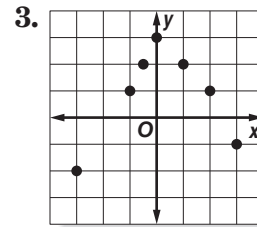
Functions

Determine whether each relation is a function.



2.

X	Y
1	-5
-4	3
7	6
1	-2



4. $\{(1, 4), (2, -2), (3, -6), (-6, 3), (-3, 6)\}$

5. $\{(6, -4), (2, -4), (-4, 2), (4, 6), (2, 6)\}$

6. $x = -2$

7. $y = 2$

If $f(x) = 2x - 6$ and $g(x) = x - 2x^2$, find each value.

8. $f(2)$

9. $f\left(-\frac{1}{2}\right)$

10. $g(-1)$

11. $g\left(-\frac{1}{3}\right)$

12. $f(7) - 9$

13. $g(-3) + 13$

14. $f(h + 9)$

15. $g(3y)$

16. $2[g(b) + 1]$

17. WAGES Martin earns \$7.50 per hour proofreading ads at a local newspaper. His weekly wage w can be described by the equation $w = 7.5h$, where h is the number of hours worked.

a. Write the equation in function notation.

b. Find $f(15)$, $f(20)$, and $f(25)$.

18. ELECTRICITY The table shows the relationship between resistance R and current I in a circuit.

Resistance (ohms)	120	80	48	6	4
Current (amperes)	0.1	0.15	0.25	2	3

a. Is the relationship a function? Explain.

b. If the relation can be represented by the equation $IR = 12$, rewrite the equation in function notation so that the resistance R is a function of the current I .

c. What is the resistance in a circuit when the current is 0.5 ampere?