

## Functions Practice

**Evaluate each function.**

1)  $p(n) = 3n$ ; Find  $p(-8)$

2)  $g(n) = n^2 + 5n$ ; Find  $g(3)$

3)  $h(n) = -3n - 1$ ; Find  $h(-9)$

4)  $g(t) = -3t + 2$ ; Find  $g(10)$

5)  $f(a) = -2a$ ; Find  $f(-1)$

6)  $f(x) = 4x - 2$ ; Find  $f(x^2)$

7)  $w(a) = 3a - 3$ ; Find  $w(3a)$

8)  $k(a) = 4a + 2$ ; Find  $k(4a)$

9)  $p(n) = -3n - 2$ ; Find  $p(4n)$

10)  $g(x) = -x + 4$ ; Find  $g(-x)$

**Perform the indicated operation.**

11)  $h(a) = 2a + 4$   
 $g(a) = a^3 - 3a$   
Find  $h(7) \div g(7)$

12)  $g(a) = a + 2$   
 $h(a) = a + 1$   
Find  $(g - h)(-9)$

13)  $g(n) = n^2 + 5$   
 $f(n) = n - 4$   
Find  $g(-1) \cdot f(-1)$

14)  $g(x) = x^2 - 4x$   
 $f(x) = 2x$   
Find  $g(-4) + f(-4)$

15)  $f(t) = t^2 + 4t$   
 $g(t) = -2t + 4$   
Find  $\left(\frac{f}{g}\right)(1)$

16)  $f(n) = 3n - 4$   
 $g(n) = 2n - 5$   
Find  $(f - g)(n^2)$

17)  $g(n) = n - 5$   
 $f(n) = 4n + 1$   
Find  $g(-n) - f(-n)$

18)  $g(x) = 2x - 3$   
 $h(x) = -2x - 4$   
Find  $g(x + 4) + h(x + 4)$

19)  $g(x) = 4x - 3$   
 $h(x) = x^2 + 7x$   
Find  $g(-x) - h(-x)$

20)  $h(x) = 2x^2 + 5$   
 $g(x) = 4x - 1$   
Find  $h(-2x) \cdot g(-2x)$