

7-3 Functions

Date _____ Period _____

Evaluate each function.

1) $f(x) = -2x^3 - 5$; Find $f(-2)$

2) $f(x) = x^2 + 1$; Find $f(-10)$

3) $h(n) = n^2 - 3$; Find $h(-3)$

4) $p(x) = 2x + 5$; Find $p(-3)$

5) $g(a) = a^2 - 5a$; Find $g(-3a)$

6) $w(n) = n - 2$; Find $w\left(\frac{x}{2}\right)$

7) $g(a) = a^2 + 4a$; Find $g(3a)$

8) $g(x) = x + 3$; Find $g(2 + x)$

9) $k(n) = n^3 + 2n^2$; Find $k(b + 4)$

10) $f(n) = -3n^2 - 3n$; Find $f(n - 2)$

11) $f(x) = -x^2 + 5x$; Find $f(x - 2)$

12) $p(n) = n^3 + 4n$; Find $p(n - 2)$

13) $h(t) = t^3 + 5t^2$; Find $h(-1)$

14) $g(x) = 4x + 5$; Find $g(-5)$

15) $g(n) = 4n + 1$; Find $g(n^2)$

16) $h(x) = 2x + 4$; Find $h(x^2)$

Perform the indicated operation.

17) $f(x) = x^2 - 5x$
 $g(x) = -2x$
Find $(f \circ g)(x)$

18) $f(a) = 3a + 3$
 $g(a) = a^3 + 1$
Find $(f \circ g)(a)$

19) $f(n) = -3n + 4$
 $g(n) = 3n^3 - 3$
Find $(f \circ g)(n)$

20) $h(n) = -3n^2 + 4n$
 $g(n) = n + 2$
Find $(h \circ g)(n)$

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

22) $g(x) = -3x - 5$
 $f(x) = 2x + 5$
Find $(g \circ f)(x)$

23) $h(a) = a^2 - 3 - 2a$
 $g(a) = 4a + 1$
Find $h(g(3))$

24) $h(x) = 3x + 2$
 $g(x) = x + 4$
Find $(h \circ g)(0)$

25) $g(x) = -4x + 1$
 $h(x) = -x - 3$
Find $(g \circ h)(-8)$

26) $g(x) = x - 4$
 $h(x) = 4x + 1$
Find $(g \circ h)(9)$

27) $g(n) = 2n + 5$
Find $(g \circ g)(-9)$

28) $g(x) = -x$
 $h(x) = x^2 + 1$
Find $g(h(-3))$

29) $g(t) = -2t + 3$
 $h(t) = t + 2$
Find $g(h(t + 4))$

30) $f(x) = x^2 - 4$
 $g(x) = 3x$
Find $f(g(x - 1))$