

Composition of Functions Version 2

Date _____ Period _____

Perform the indicated operation.

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

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

3) $g(a) = a - 4$
 $h(a) = a^2 - 5a$
Find $g(h(a))$

4) $f(a) = 2a$
 $g(a) = a^2 + 4a$
Find $f(g(a))$

5) $g(n) = n + 1$
 $h(n) = -2n^3 + 5 - n$
Find $g(h(n))$

6) $g(x) = -3x$
 $f(x) = x^2 + 2$
Find $g(f(x))$

7) $h(x) = x - 5$
 $g(x) = x^2 - 1$
Find $h(g(x))$

8) $f(x) = x^2 - 5$
 $g(x) = 3x + 1$
Find $f(g(x))$

9) $f(n) = n + 2$
 $g(n) = n^3 + 3n^2$
Find $f(g(0))$

10) $h(t) = t + 5$
 $g(t) = t^2 + 1$
Find $h(g(0))$

11) $g(n) = 2n - 2$
 $f(n) = 4n - 4$
Find $g(f(-2))$

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

13) $f(x) = 2x + 3$
 $g(x) = -3x - 1$
Find $f(g(-9))$

14) $f(a) = a^2 - 3$
 $g(a) = a - 4$
Find $f(g(-9))$

15) $g(a) = 2a - 3$
 $h(a) = a^2 + 2a$
Find $g(h(8))$

16) $g(x) = 4x + 3$
 $h(x) = 2x + 1$
Find $g(h(-10))$

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Perform the indicated operation.

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

$$-a^3 + 2a$$

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

$$-x - 1$$

3) $g(a) = a - 4$
 $h(a) = a^2 - 5a$
Find $g(h(a))$

$$a^2 - 5a - 4$$

4) $f(a) = 2a$
 $g(a) = a^2 + 4a$
Find $f(g(a))$

$$2a^2 + 8a$$

5) $g(n) = n + 1$
 $h(n) = -2n^3 + 5 - n$
Find $g(h(n))$

$$-2n^3 - n + 6$$

6) $g(x) = -3x$
 $f(x) = x^2 + 2$
Find $g(f(x))$

$$-3x^2 - 6$$

7) $h(x) = x - 5$
 $g(x) = x^2 - 1$
Find $h(g(x))$

$$x^2 - 6$$

8) $f(x) = x^2 - 5$
 $g(x) = 3x + 1$
Find $f(g(x))$

$$9x^2 + 6x - 4$$

9) $f(n) = n + 2$
 $g(n) = n^3 + 3n^2$
Find $f(g(0))$

2

10) $h(t) = t + 5$
 $g(t) = t^2 + 1$
Find $h(g(0))$

6

11) $g(n) = 2n - 2$
 $f(n) = 4n - 4$
Find $g(f(-2))$

-26

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

-78

13) $f(x) = 2x + 3$
 $g(x) = -3x - 1$
Find $f(g(-9))$

55

14) $f(a) = a^2 - 3$
 $g(a) = a - 4$
Find $f(g(-9))$

166

15) $g(a) = 2a - 3$
 $h(a) = a^2 + 2a$
Find $g(h(8))$

157

16) $g(x) = 4x + 3$
 $h(x) = 2x + 1$
Find $g(h(-10))$

-73