

## Composition of Functions v3

Date \_\_\_\_\_ Period \_\_\_\_\_

**Perform the indicated operation.**

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

2)  $g(t) = -t - 4$   
 $f(t) = t^2 - 3$   
Find  $g(f(t))$

3)  $h(x) = x + 4$   
 $g(x) = 4x + 3$   
Find  $h(g(x))$

4)  $g(t) = -2t + 5$   
 $h(t) = t + 4$   
Find  $g(h(t))$

5)  $h(x) = 2x + 1$   
 $g(x) = -4x + 5$   
Find  $h(g(x))$

6)  $h(t) = -2t + 5$   
 $g(t) = 3t + 4$   
Find  $h(g(t))$

7)  $g(n) = 4n - 4$   
 $h(n) = n^2 + 5$   
Find  $g(h(n))$

8)  $g(a) = 3a + 3$   
 $h(a) = a^2 + 5a$   
Find  $g(h(a))$

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

10)  $g(a) = a + 3$   
 $f(a) = -2a + 2$   
Find  $g(f(-7))$

11)  $h(t) = -t + 1$   
 $g(t) = 3t - 2$   
Find  $h(g(-3))$

12)  $g(x) = 2x$   
 $h(x) = 4x + 5$   
Find  $g(h(3))$

13)  $g(x) = 2x - 5$   
 $h(x) = -2x + 3$   
Find  $g(h(4))$

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

15)  $g(t) = 2t + 5$   
 $h(t) = t^2 + 5$   
Find  $g(h(3))$

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

## Composition of Functions v3

Date \_\_\_\_\_ Period \_\_\_\_\_

**Perform the indicated operation.**

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

$$6x + 14$$

2)  $g(t) = -t - 4$   
 $f(t) = t^2 - 3$   
Find  $g(f(t))$

$$-t^2 - 1$$

3)  $h(x) = x + 4$   
 $g(x) = 4x + 3$   
Find  $h(g(x))$

$$4x + 7$$

4)  $g(t) = -2t + 5$   
 $h(t) = t + 4$   
Find  $g(h(t))$

$$-2t - 3$$

5)  $h(x) = 2x + 1$   
 $g(x) = -4x + 5$   
Find  $h(g(x))$

$$-8x + 11$$

6)  $h(t) = -2t + 5$   
 $g(t) = 3t + 4$   
Find  $h(g(t))$

$$-6t - 3$$

7)  $g(n) = 4n - 4$   
 $h(n) = n^2 + 5$   
Find  $g(h(n))$

$$4n^2 + 16$$

8)  $g(a) = 3a + 3$   
 $h(a) = a^2 + 5a$   
Find  $g(h(a))$

$$3a^2 + 15a + 3$$

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

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10)  $g(a) = a + 3$   
 $f(a) = -2a + 2$   
Find  $g(f(-7))$

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11)  $h(t) = -t + 1$   
 $g(t) = 3t - 2$   
Find  $h(g(-3))$

12

12)  $g(x) = 2x$   
 $h(x) = 4x + 5$   
Find  $g(h(3))$

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13)  $g(x) = 2x - 5$   
 $h(x) = -2x + 3$   
Find  $g(h(4))$

-15

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

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15)  $g(t) = 2t + 5$   
 $h(t) = t^2 + 5$   
Find  $g(h(3))$

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

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