

Composition of Functions



Perform the indicated operation.

1) $f(x) = 10x + 4$
 $g(x) = 6x + 4$
Find $f(g(-4))$

2) $f(x) = 4x + 1$
 $g(x) = 3x + 3$
Find $g(g(2))$

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

4) $f(x) = 7x + 2$
 $g(x) = 2x + 3$
Find $g(g(4))$

5) $f(x) = 2x + 4$
 $g(x) = 6x + 2$
Find $g(g(2))$

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

7) $f(x) = 6x + 7$
 $g(x) = 4x + 2$
Find $f(g(4))$

8) $f(x) = 5x + 4$
 $g(x) = 7x + 2$
Find $f(g(x))$

9) $f(x) = 4x + 2$
 $g(x) = 5x + 3$
Find $f(g(2))$

10) $f(x) = 11x + 1$
 $g(x) = 6x + 1$
Find $g(g(1))$

11) $f(x) = 5x + 3$
 $g(x) = 6x + 4$
Find $g(g(2))$

12) $f(x) = 11x + 7$
 $g(x) = 6x + 4$
Find $f(g(-4))$

13) $f(x) = 8x + 8$
 $g(x) = 4x + 4$
Find $g(g(4))$

14) $f(x) = 11x + 5$
 $g(x) = 8x + 2$
Find $f(g(x))$

15) $f(x) = 5x + 7$
 $g(x) = 7x + 3$
Find $f(f(x))$

16) $f(x) = 10x + 7$
 $g(x) = 6x + 4$
Find $g(g(3))$

Answers of Composition of Functions



Perform the indicated operation.

1) $f(x) = 10x + 4$
 $g(x) = 6x + 4$
Find $f(g(-4))$
 $f(g(-4)) = -196$

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

3) $f(x) = 5x + 4$
 $g(x) = 2x + 4$
Find $f(g(-1))$
 $f(g(-1)) = 14$

4) $f(x) = 7x + 2$
 $g(x) = 2x + 3$
Find $g(g(4))$
 $g(g(4)) = 25$

5) $f(x) = 2x + 4$
 $g(x) = 6x + 2$
Find $g(g(2))$
 $g(g(2)) = 86$

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

7) $f(x) = 6x + 7$
 $g(x) = 4x + 2$
Find $f(g(4))$
 $f(g(4)) = 115$

8) $f(x) = 5x + 4$
 $g(x) = 7x + 2$
Find $f(g(x))$
 $f(g(x)) = 35x + 14$

9) $f(x) = 4x + 2$
 $g(x) = 5x + 3$
Find $f(g(2))$
 $f(g(2)) = 54$

10) $f(x) = 11x + 1$
 $g(x) = 6x + 1$
Find $g(g(1))$
 $g(g(1)) = 43$

11) $f(x) = 5x + 3$
 $g(x) = 6x + 4$
Find $g(g(2))$
 $g(g(2)) = 100$

12) $f(x) = 11x + 7$
 $g(x) = 6x + 4$
Find $f(g(-4))$
 $f(g(-4)) = -213$

13) $f(x) = 8x + 8$
 $g(x) = 4x + 4$
Find $g(g(4))$
 $g(g(4)) = 84$

14) $f(x) = 11x + 5$
 $g(x) = 8x + 2$
Find $f(g(x))$
 $f(g(x)) = 88x + 27$

15) $f(x) = 5x + 7$
 $g(x) = 7x + 3$
Find $f(f(x))$
 $f(f(x)) = 25x + 42$

16) $f(x) = 10x + 7$
 $g(x) = 6x + 4$
Find $g(g(3))$
 $g(g(3)) = 136$