

Solutions – Composite Functions (A)

Given $f(x) = -3x - 2$ and $g(x) = -3x + 1$, find $f(g(-1))$.

$$f(g(-1)) = -14$$

Given $f(x) = -x^2 - x + 5$ and $g(x) = -2x^2 + 5$, find $g(f(0))$.

$$g(f(0)) = -45$$

Given $f(x) = -3x + 6$ and $g(x) = -x^2 + 3x - 6$, find $f(g(0))$.

$$f(g(0)) = 24$$

Given $f(x) = x^2 - x - 3$ and $g(x) = -2x - 1$, find $g(f(2))$.

$$g(f(2)) = 1$$

Given $f(x) = -x - 3$ and $g(x) = -x^2 - 3x + 4$, find $f(g(5))$.

$$f(g(5)) = 33$$

Given $f(x) = 3x - 8$ and $g(x) = 4x - 5$, find $g(f(0))$.

$$g(f(0)) = -37$$

Solutions – Composite Functions (B)

Given $f(x) = 4x - 6$ and $g(x) = x^2 + 3x + 6$, find $f(g(-2))$.

$$f(g(-2)) = 10$$

Given $f(x) = -x + 5$ and $g(x) = 4x - 7$, find $f(g(1))$.

$$f(g(1)) = 8$$

Given $f(x) = -2x^2 - x + 5$ and $g(x) = 5x - 3$, find $f(g(0))$.

$$f(g(0)) = -10$$

Given $f(x) = -x^2 - 3x - 1$ and $g(x) = -5x$, find $g(f(1))$.

$$g(f(1)) = 25$$

Given $f(x) = -x^2 + x - 2$ and $g(x) = x - 2$, find $g(f(3))$.

$$g(f(3)) = -10$$

Given $f(x) = 3x + 3$ and $g(x) = 3x + 2$, find $g(f(1))$.

$$g(f(1)) = 20$$

Solutions – Composite Functions (C)

Given $f(x) = -5x - 8$ and $g(x) = x - 4$, find $g(f(3))$.

$$g(f(3)) = -27$$

Given $f(x) = 2x + 5$ and $g(x) = 2x^2 + 2x + 4$, find $f(g(-4))$.

$$f(g(-4)) = 61$$

Given $f(x) = -3x + 5$ and $g(x) = 5x - 5$, find $g(f(3))$.

$$g(f(3)) = -25$$

Given $f(x) = -x^2 - 3x - 2$ and $g(x) = 4x + 7$, find $g(f(-2))$.

$$g(f(-2)) = 7$$

Given $f(x) = x^2 - 4x - 5$ and $g(x) = -2x + 2$, find $f(g(3))$.

$$f(g(3)) = 27$$

Given $f(x) = 2x - 8$ and $g(x) = -2x^2 - x - 6$, find $f(g(-2))$.

$$f(g(-2)) = -32$$

Solutions – Composite Functions (D)

Given $f(x) = 5x + 8$ and $g(x) = -x^2 - 4x + 5$, find $f(g(-4))$.

$$f(g(-4)) = 33$$

Given $f(x) = -x$ and $g(x) = x^2 + x + 5$, find $g(f(-4))$.

$$g(f(-4)) = 25$$

Given $f(x) = -5x - 4$ and $g(x) = 2x^2 - 2x + 6$, find $f(g(3))$.

$$f(g(3)) = -94$$

Given $f(x) = -x - 6$ and $g(x) = -5x - 2$, find $g(f(-1))$.

$$g(f(-1)) = 23$$

Given $f(x) = -x^2 + 3x + 3$ and $g(x) = 2x - 3$, find $g(f(1))$.

$$g(f(1)) = 7$$

Given $f(x) = -x + 2$ and $g(x) = x + 1$, find $f(g(4))$.

$$f(g(4)) = -3$$

Solutions – Composite Functions (E)

Given $f(x) = 3x + 1$ and $g(x) = -x^2 - 3x - 1$, find $g(f(-2))$.

$$g(f(-2)) = -11$$

Given $f(x) = x + 8$ and $g(x) = -2x^2 + 4x + 6$, find $f(g(3))$.

$$f(g(3)) = 8$$

Given $f(x) = 5x - 8$ and $g(x) = x - 8$, find $f(g(0))$.

$$f(g(0)) = -48$$

Given $f(x) = 2x + 6$ and $g(x) = 4x + 6$, find $g(f(0))$.

$$g(f(0)) = 30$$

Given $f(x) = -4x + 2$ and $g(x) = -x + 3$, find $f(g(-2))$.

$$f(g(-2)) = -18$$

Given $f(x) = -2x^2 - 4x + 5$ and $g(x) = 2x^2 - x - 1$, find $g(f(0))$.

$$g(f(0)) = 44$$

Solutions – Composite Functions (F)

Given $f(x) = -x^2 + x + 1$ and $g(x) = -x^2 + 2x + 4$, find $f(g(4))$.

$$f(g(4)) = -19$$

Given $f(x) = -5x + 4$ and $g(x) = -2x$, find $g(f(-4))$.

$$g(f(-4)) = -48$$

Given $f(x) = 5x - 4$ and $g(x) = 3x - 2$, find $f(g(-2))$.

$$f(g(-2)) = -44$$

Given $f(x) = 2x^2 - 4x$ and $g(x) = -2x^2 - 3x$, find $g(f(0))$.

$$g(f(0)) = 0$$

Given $f(x) = -2x^2 + 4x + 3$ and $g(x) = -4x - 1$, find $g(f(2))$.

$$g(f(2)) = -13$$

Given $f(x) = -x^2 - 3x - 4$ and $g(x) = -x$, find $f(g(-1))$.

$$f(g(-1)) = -8$$

Solutions – Composite Functions (G)

Given $f(x) = -x^2 - 4x$ and $g(x) = x^2 - 3$, find $g(f(-3))$.

$$g(f(-3)) = 6$$

Given $f(x) = 5x + 4$ and $g(x) = 4x - 3$, find $f(g(3))$.

$$f(g(3)) = 49$$

Given $f(x) = -2x^2 - 2x - 2$ and $g(x) = 2x^2 + 4x - 3$, find $f(g(-2))$.

$$f(g(-2)) = -14$$

Given $f(x) = -2x^2 - x + 1$ and $g(x) = x^2 + 2x - 5$, find $f(g(2))$.

$$f(g(2)) = -20$$

Given $f(x) = -x^2 + 4x - 2$ and $g(x) = -x - 8$, find $g(f(5))$.

$$g(f(5)) = -1$$

Given $f(x) = 5x + 8$ and $g(x) = -3x + 6$, find $g(f(-2))$.

$$g(f(-2)) = 12$$

Solutions – Composite Functions (H)

Given $f(x) = -2x - 7$ and $g(x) = -3x + 3$, find $g(f(2))$.

$$g(f(2)) = 36$$

Given $f(x) = -x + 2$ and $g(x) = -x + 5$, find $f(g(4))$.

$$f(g(4)) = 1$$

Given $f(x) = -3x + 8$ and $g(x) = 3x + 8$, find $g(f(2))$.

$$g(f(2)) = 14$$

Given $f(x) = -2x^2 - 4x + 2$ and $g(x) = 2x^2 - x + 4$, find $g(f(1))$.

$$g(f(1)) = 40$$

Given $f(x) = -2x + 3$ and $g(x) = x - 8$, find $f(g(-5))$.

$$f(g(-5)) = 29$$

Given $f(x) = -x^2 - 4x + 4$ and $g(x) = x^2 + 2$, find $f(g(0))$.

$$f(g(0)) = -8$$

Solutions – Composite Functions (I)

Given $f(x) = 5x - 7$ and $g(x) = -2x + 3$, find $g(f(-3))$.

$$g(f(-3)) = 47$$

Given $f(x) = x^2 + 4x - 4$ and $g(x) = 4x + 3$, find $f(g(-2))$.

$$f(g(-2)) = 1$$

Given $f(x) = -x - 5$ and $g(x) = -3x - 6$, find $g(f(-4))$.

$$g(f(-4)) = -3$$

Given $f(x) = -4x + 3$ and $g(x) = -2x$, find $f(g(4))$.

$$f(g(4)) = 35$$

Given $f(x) = 5x + 5$ and $g(x) = -x^2 + x - 2$, find $f(g(-3))$.

$$f(g(-3)) = -65$$

Given $f(x) = x^2 + x - 4$ and $g(x) = -4x - 2$, find $g(f(0))$.

$$g(f(0)) = 14$$

Solutions – Composite Functions (J)

Given $f(x) = 2x + 7$ and $g(x) = 4x - 5$, find $g(f(2))$.

$$g(f(2)) = 39$$

Given $f(x) = 4x + 5$ and $g(x) = -2x^2 + 2x - 6$, find $f(g(-1))$.

$$f(g(-1)) = -35$$

Given $f(x) = 5x + 3$ and $g(x) = -x^2 - 2x - 5$, find $g(f(0))$.

$$g(f(0)) = -20$$

Given $f(x) = -2x^2 + 5$ and $g(x) = -5x - 8$, find $g(f(-2))$.

$$g(f(-2)) = 7$$

Given $f(x) = -3x - 5$ and $g(x) = -2x^2 + 2x - 4$, find $f(g(-3))$.

$$f(g(-3)) = 79$$

Given $f(x) = 2x + 4$ and $g(x) = 2x^2 - 3x + 5$, find $f(g(5))$.

$$f(g(5)) = 84$$