

SM3 HW #4-2 (Composition of Functions)

Evaluate each function.

1) $h(n) = n^2 - 2$; Find $h(-10)$

2) $k(a) = |a + 2|$; Find $k(0)$

3) $w(x) = -2x - 2$; Find $w(x^2)$

4) $g(x) = x - 4$; Find $g(3 - x)$

5) For the following two functions, find $f(g(x))$

$f(x) = 2x - 2$

$g(x) = x - 2$

6) For the following two functions, find $f(g(x))$

$f(x) = x + 3$

$g(x) = x^2 - 1$

Perform the indicated operation.

7) $g(x) = x^2 - 5x$

$h(x) = 4x - 4$

Find $(g \circ h)(x)$

8) $f(x) = x - 3$

Find $(f \circ f)(x)$

9) $h(n) = 2n - 5$

$g(n) = -2n^3 - 2n$

Find $(h \circ g)(n)$

10) $h(n) = n - 4$

$g(n) = n^2 - 2n$

Find $(h \circ g)(-9)$

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

$h(a) = -2a^2 - 1$

Find $(g \circ h)(2)$

12) $g(n) = n^2 - 3 - n$

$h(n) = n - 3$

Find $(g \circ h)(4)$

a) Factor each trinomial (provide the intercept form of the equation).

b) Determine the "zeroes" of the equation (remember the Zero Product Property!)

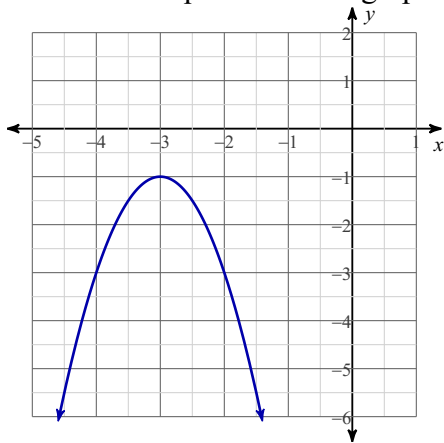
13) $p^2 + 4p = 0$

14) $n^2 - 3n - 18 = 0$

15) $2x^2 - x - 21 = 0$

16) $6k^2 + 12k - 18 = 0$

17) What is the equation of the graph?



18) What is the equation of the graph?

