

Review Topic #1: Functions

Date _____

Evaluate each function.

1) $h(n) = -n - 3$; Find $h(-7)$

2) $f(a) = -2a^2 - 1$; Find $f(2a)$

3) $h(x) = 4x - 3$; Find $h(2x)$

4) $h(n) = n^2 - n$; Find $h(-t)$

5) $g(n) = 2^n$; Find $g(2n)$

Find the inverse of each function.

6) $f(x) = \frac{-x + 5}{10}$

7) $f(x) = \sqrt[3]{x - 2} - 1$

8) $f(x) = \frac{1}{x - 3} + 2$

9) $g(x) = (x - 2)^3$

Perform the indicated operation.

10) $h(x) = x^3 + 5$
 $g(x) = x + 4$
Find $h(x) - g(x)$

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

12) $f(n) = 3n$
 $g(n) = 4n - 2$
Find $f(-2n) \cdot g(-2n)$

13) $g(t) = 4t - 2$
Find $g(g(-3x))$

Answers to Review Topic #1: Functions (ID: 1)

1) 4

5) 2^{2n}

9) $g^{-1}(x) = \sqrt[3]{x} + 2$

13) $-48x - 10$

2) $-8a^2 - 1$

6) $f^{-1}(x) = -10x + 5$

10) $x^3 - x + 1$

3) $8x - 3$

7) $f^{-1}(x) = 2 + (x + 1)^3$

11) 7

4) $t^2 + t$

8) $f^{-1}(x) = \frac{1}{x-2} + 3$

12) $48n^2 + 12n$