

Name: _____

Evaluating Functions

1. Let $g(x) = -4x + 1$. Evaluate each of the following:

(a) $g(-1)$

(b) $g(-2)$

(c) $g(0)$

(d) $g(4)$

2. Let $f(x) = 2x + 3$. Evaluate each of the following:

(a) $f(-2)$

(b) $f(6)$

(c) $f(-1)$

(d) $f\left(\frac{3}{2}\right)$

3. Let $g(x) = x^2 + 4x - 1$. Evaluate each of the following:

(a) $g(-4)$

(b) $g(7)$

(c) $g\left(\frac{-1}{2}\right)$

(d) $g(1)$

4. Let $f(x) = 3x^2 - 5x$. Evaluate each of the following:

(a) $f(2)$

(b) $f(-6)$

(c) $f(7)$

(d) $f(-2)$

Work should be shown for all problems. Problem A in the answer key demonstrates how work should appear for each problem.

1. A) $g(-1) = -4(-1) + 1$ b) 9 c) 1 d) -15
 $= 4 + 1$
 $g(-1) = 5$

2. A) $f(-2) = 2(-2) + 3$ b) 15 c) 1 d) 6
 $= -4 + 3$
 $f(-2) = -1$

3. A) $g(-4) = (-4)^2 + 4(-4) - 1$ b) 76 c) $-19/4$ or $-2 \frac{3}{4}$ d) 4
 $= 16 + -16 - 1$
 $= 0 - 1$
 $g(-4) = -1$

4. A) $f(2) = 3(2)^2 - 5(2)$ b) 138 c) 112 d) 22
 $= 3(4) - 10$
 $= 12 - 10$
 $f(2) = 2$