

EXTRA PRACTICE 12
Finding Function Values
Use after Section 2.2

Name _____

Examples.

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

$$f(-2) = 3(-2) - 7 = -6 - 7 = -13$$

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

$$f(0) = 2(0)^2 - 5(0) + 2 = 2 \cdot 0 - 5 \cdot 0 + 2 = 2$$

Given $f(x) = x^3 + 7x - 1$, find $f(3a)$.

$$f(3a) = (3a)^3 + 7(3a) - 1 = 27a^3 + 21a - 1$$

Find the function values.

1. $f(x) = 2x + 5$

a) $f(-2) =$ _____

b) $f(-8) =$ _____

c) $f(0) =$ _____

d) $f(12) =$ _____

e) $f\left(\frac{3}{4}\right) =$ _____

2. $g(t) = t^2 - 5$

a) $g(0) =$ _____

b) $g(7) =$ _____

c) $g(-9) =$ _____

d) $g(-1.4) =$ _____

e) $g\left(\frac{2}{3}\right) =$ _____

3. $h(x) = -22$

a) $h(-11) =$ _____

b) $h(-16) =$ _____

c) $h(0) =$ _____

d) $h(15) =$ _____

e) $h(209) =$ _____

4. $f(x) = |x| - 8$

a) $f(-19) =$ _____

b) $f(-1) =$ _____

c) $f(0) =$ _____

d) $f(18) =$ _____

e) $f(100) =$ _____

5. $g(t) = |t - 2|$

a) $g(7) =$ _____

b) $g(-5) =$ _____

c) $g(-30) =$ _____

d) $g(400) =$ _____

e) $g(a + 1) =$ _____

6. $f(x) = 2x^3 - x$

a) $f(0) =$ _____

b) $f(4) =$ _____

c) $f(-3) =$ _____

d) $f(4a) =$ _____

e) $f(-10) =$ _____