

Unit 5: Functions

PRACTICE · SET 2

Name: _____

Date: _____

Show your work and write your final answer on the line. Use exact values (fractions, coordinate pairs) where asked.

1. Given $f(x) = 3x - 7$, evaluate $f(4)$.

Answer: _____

2. Given $g(x) = x^2 - 2x + 1$, evaluate $g(-3)$.

Answer: _____

3. Given $f(x) = 2x + 5$, find the value of x when $f(x) = 17$.

Answer: _____

4. Given $h(x) = -4x + 9$, evaluate $h(0)$.

Answer: _____

5. The function f is defined by the set of ordered pairs $\{(1, 4), (2, 7), (3, 10), (4, 13)\}$. Find $f(3)$.

Answer: _____

6. For the function $f(x) = 5x - 2$, compute $f(a + 1)$ when $a = 3$ (that is, evaluate $f(4)$).

Answer: _____

7. A function has domain $\{-2, 0, 1, 5\}$. What is the smallest value in its domain?

Answer: _____

8. The function $f(x) = x^2$ has the domain $\{-3, -1, 0, 2\}$. List the value in its range that is largest.

Answer: _____

9. Given $f(x) = (x + 6)/2$, evaluate $f(10)$.

Answer: _____

10. Given $f(x) = 3x - 7$ and $g(x) = x + 2$, evaluate $f(g(1))$.

Answer: _____

11. A linear function f has $f(2) = 5$ and $f(6) = 17$. What is the rate of change (slope) of f ?

Answer: _____

12. The graph of a function crosses the x -axis where $f(x) = 0$. For $f(x) = 2x - 8$, find the x -intercept as a coordinate pair.

Answer: _____