

Unit 5: Functions

PRACTICE

Name: _____ Date: _____

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

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

Answer: _____

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

Answer: _____

3. Given $f(x) = 5x + 2$, find the value of x for which $f(x) = 27$.

Answer: _____

4. The function h is defined by $h(x) = -2x + 9$. Find $h(0)$.

Answer: _____

5. For $f(x) = (x + 6)/2$, find $f(10)$.

Answer: _____

6. A function is given by the set of ordered pairs $\{(1, 4), (2, 7), (3, 10), (4, 13)\}$. What is $f(3)$?

Answer: _____

7. For the function in the previous set $\{(1, 4), (2, 7), (3, 10), (4, 13)\}$, what is the range? List the values in increasing order separated by commas.

Answer: _____

8. Given $f(x) = 4x - 1$, evaluate $f(2) + f(3)$.

Answer: _____

9. The graph of a line passes through $(0, -3)$ and has slope 2. Writing it as $f(x) = 2x - 3$, find $f(5)$.

Answer: _____

10. Given $f(x) = x^2$, find $f(6) - f(4)$.

Answer: _____

11. The domain of $f(x) = \sqrt{x - 5}$ is all x greater than or equal to a . What is the value of a ?

Answer: _____

12. Given $f(x) = 8 - x$, for what value of x does $f(x) = x$? (Answer with the number.)

Answer: _____