

WS 10-6-4 "Function Notation"

Write in function notation.

1) $y = 5x + 3$

$f(x) = 5x + 3$

2) $C = 12n - 100$

$C(n) = 12n - 100$

3) $d = 50t$

$d(t) = 50t$

4) $m = 4p^2 - 3p + 7$

$m(p) = 4p^2 - 3p + 7$

Write as an equation with two variables.

5) $f(x) = 6x - 9$

$y = 6x - 9$

6) $h(x) = x^2 - 5x + 9$

$y = x^2 - 5x + 9$

7) $g(t) = 8t^3$

$y = 8t^3$

8) $C(n) = 15n + 90$

$C = 15n + 90$

Evaluate each function.

9) $w(x) = 4x + 5$; Find $w(-8)$

-27

10) $h(x) = 2x + 5$; Find $h(2)$

9

11) $g(n) = 4n - 5$; Find $g(6)$

19

12) $g(n) = n + 2$; Find $g(1)$

3

13) $g(n) = n^2 + 4n$; Find $g(2)$

12

14) $h(n) = 3n^2 - 4$; Find $h(0)$

-4

15) $h(n) = -3n^2 - 5n$; Find $h(2)$

-22

16) $h(x) = x^3 + 4$; Find $h(-5)$

-121

Evaluate the following expressions given $f(x) = 4x - 2$, $g(x) = 3x - 3$ and $h(x) = 8x + 10$

17) Find x if $f(x) = 2$

$$x = 1$$

18) Find x if $g(x) = 12$

$$x = 5$$

19) Find x if $h(x) = 10$

$$x = 0$$

20) Find x if $f(x) = 1$

$$x = \frac{3}{4}$$

21) $f(3) + g(2)$

$$13$$

22) $f(-1) + h(3)$

$$24$$

23) $f(5^{\frac{1}{2}})$

$$6.94$$

24) $g(7^{\frac{2}{3}})$

$$12.64$$

25) Find x if $g(x) = f(x)$

$$x = -1$$

26) Find x if $f(x) = h(x)$

$$x = -3$$

Evaluate each function.

27) $k(a) = 4a + 2$; Find $k(a - 3)$

$$4a - 10$$

28) $h(t) = -2t + 2$; Find $h(-3t)$

$$6t + 2$$

29) $h(n) = 3n + 5$; Find $h(-4n)$

$$-12n + 5$$

30) $h(x) = x^2 + 1$; Find $h\left(\frac{x}{4}\right)$

$$1 + \frac{1}{16}x^2$$

Write the ordered pairs that represents the following expressions.

31) $f(5) = 9$

$$(5, 9)$$

32) $g(-3) = 7$

$$(-3, 7)$$