

$f(x) = 7x - 1$

$g(x) = 3(x - 1)$

$h(x) = 2x^2 - 1$

a) $h(2)$

$h(x) = 2x^2 - 1$
 $h(2) = 2(2)^2 - 1$
 $h(2) = 2(4) - 1$
 $h(2) = 8 - 1$
 $h(2) = 7$

b) $h(3) - f(3)$

$h(x) = 2x^2 - 1$	$f(x) = 7x - 1$
$h(3) = 2(3)^2 - 1$	$f(3) = 7(3) - 1$
$h(3) = 2(9) - 1$	$f(3) = 21 - 1$
$h(3) = 18 - 1$	$f(3) = 20$
$h(3) = 17$	
	$17 - 20 = -3$

c) $g(x) = 57$

$3(x - 1) = g(x)$
 $3(x - 1) = 57$
 $3x - 3 = 57 + 3$
 $3x = 60$
 $x = 20$

Hours Worked, h	Gross Pay, P (\$)
1	12
2	24
3	36
4	48
5	60

Write the equation of the linear function.

$$y = mx + b$$

$$y = 12x + 0$$

$$P = 12h + 0$$

What is the person's pay after 20 hours?

Try This!!

Number of Marbles, n	Mass of Marbles, m (g)
1	1.27
2	2.54
3	3.81
4	5.08
5	6.35
6	7.62

- State the domain & Range.
- Is this relation a function?
- Write the function notation.

Solution:

a) **Domain:** { 1, 2, 3, 4, 5 }
Range: {1.27, 2.54, 3.81, 5.08, 6.35, 7.62}

b) **Function**

c) **Independent - number of marbles**
Dependent - Mass

d) **$C(n) = 1.27 n$**

