



Questions?  
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Ask Question 

A plumber charges \$40 per work, plus \$35 per hour.  
Write an equation describing this situation.

Question

$$y = f(x) = mx + b$$

$$m = 35, b = 40$$

$$y = f(x) = 35x + 40$$

Answer

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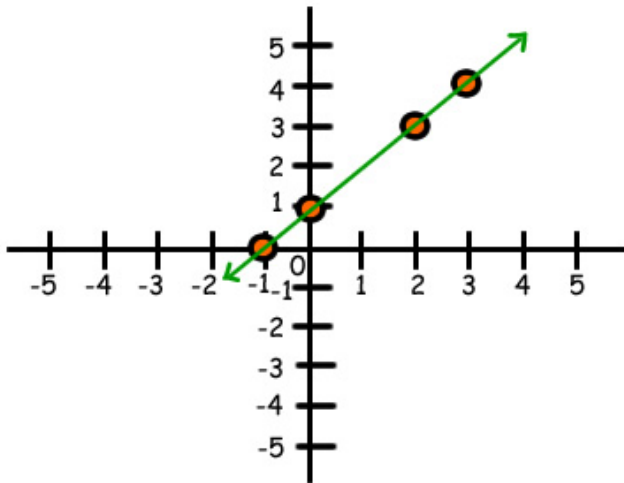


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Ask Question

Identify the relationship and write an equation for the function described by:  $\{(0, 1); (3, 4); (2, 3); (-1, 0)\}$ .

Question



Answer

$\{(-1, 0); (0, 1); (2, 3); (3, 4)\}$

| Input(x) |                | Output(y) |
|----------|----------------|-----------|
| -1       | $(-1) + 1 = 0$ | 0         |
| 0        | $0 + 1 = 1$    | 1         |
| 2        | $2 + 1 = 3$    | 3         |
| 3        | $3 + 1 = 4$    | 4         |

$$y = f(x) = x + 1$$

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Questions?  
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$F(x) = x^2 - 1$ . Find  $F(x)$  for  $x = 3$ .

Question

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

$$x = 3$$

$$F(x) = 3^2 - 1$$

$$F(x) = 9 - 1$$

$$F(x) = 8$$

Answer

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Questions?  
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Ask Question 

$F(x) = 5 - x - x^3$ . Find  $F(x)$  for  $x = 1$ .

Question

$$F(x) = 5 - x - x^3$$

Answer

$$x = 1$$

$$F(x) = 5 - (1) - (1)^3$$

$$F(x) = 5 - 1 - 1$$

$$F(x) = 3$$

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Questions?  
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Identify the relationship and write an equation for the function described by:  $\{(1,1); (2, 4); (4, 16); (-1, 1)\}$ .

Question

$\{(-1, 1); (1, 1); (2, 4); (4, 16)\}$

Answer

| Input(x) |              | Output(y) |
|----------|--------------|-----------|
| -1       | $(-1)^2 = 1$ | 1         |
| 1        | $(1)^2 = 1$  | 1         |
| 2        | $(2)^2 = 4$  | 4         |
| 4        | $(4)^2 = 16$ | 16        |

$$y = f(x) = x^2$$

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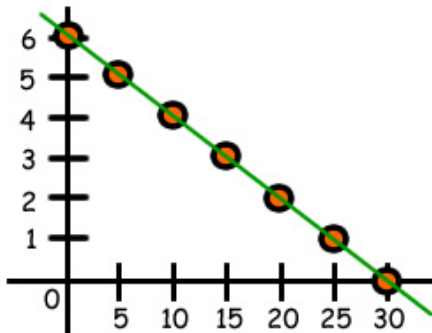
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**Question**  
A painter paints 1 square meter of wall every 5 minutes. If the wall has 6 square meters, write an equation describing the unpainted area of the wall.



**Answer**

| Input(x) |                        | Output(y) |
|----------|------------------------|-----------|
| 0        | $-\frac{1}{5}(0) + 6$  | 6         |
| 5        | $-\frac{1}{5}(5) + 6$  | 5         |
| 10       | $-\frac{1}{5}(10) + 6$ | 4         |
| 15       | $-\frac{1}{5}(15) + 6$ | 3         |
| 20       | $-\frac{1}{5}(20) + 6$ | 2         |
| 25       | $-\frac{1}{5}(25) + 6$ | 1         |
| 30       | $-\frac{1}{5}(30) + 6$ | 0         |

$$y = f(x) = -\frac{1}{5}x + 6$$

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