

1. The sum of 42 and a number n is 51.

$$n + 42 = 51$$

2. The difference of z and 11 is greater than 16.

$$z - 11 > 16$$

3. The sum of n and 4 is less than or equal to 13.

$$n + 4 \leq 13$$

4. The quotient of t and 4.2 is at least 33.

$$\frac{t}{4.2} \geq 33$$

Is it a solution?

1. $9 + 4y = 17; y = 1$

2. $2p - 1 > 7; p = 3$

3. $y - 3.5 < 6; y = 9$

4. $k/5 + 9 = 11; k = 10 \rightarrow \frac{k}{5} + 9 = 11$

1.6 Functions/Patterns

· Looking at #'s

$$1 \text{ gallon gas} = \$2.70$$

gal	1	5	10	21	→ Called Domain, inputs, x
Cost	2.70	13.50	27	56.70	→ Called Range, outputs, y

\uparrow 2.70×5 \uparrow 2.70×10 \nwarrow 2.70×21

$$\text{Cost} = 2.70 * \text{gallons}$$

Rule: $y = 2.70x$

Find the rule

input	0	1	4	6	10
output	2	3	6	8	12

pattern: add 2

rule: $y = x + 2$ or $x + 2 = y$

Find the range for

$$y = 3x + 4$$

D: -1, 0, 5, 10 (are the x's)

x	y	
-1	1	$3(-1) + 4$
0	4	$3(0) + 4$
5	19	$3(5) + 4$
10	34	$3(10) + 4$