

1. Evaluate the following expressions given the functions below:

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

$$f(x) = x^2 + 7$$

$$h(x) = \frac{12}{x}$$

$$j(x) = 2x + 9$$

a. $g(10) =$

b. $f(3) =$

c. $h(-2) =$

d. $j(7) =$

e. $h(a)$

f. $g(b+c)$

h. Find x if $g(x) = 16$

i. Find x if $h(x) = -2$

j. Find x if $f(x) = 23$

2. Given $f(x) = 3 - 4x$. Fill in the table and then sketch a graph.

x	$f(x)$
-2	
-1	
0	
1	
	-9

3. Translate the following statements into coordinate points, then plot them!

a. $f(-1) = 1$

b. $f(2) = 7$

c. $f(1) = -1$

d. $f(3) = 0$

4. Given this graph of the function $f(x)$:

Find:

a. $f(-4) =$

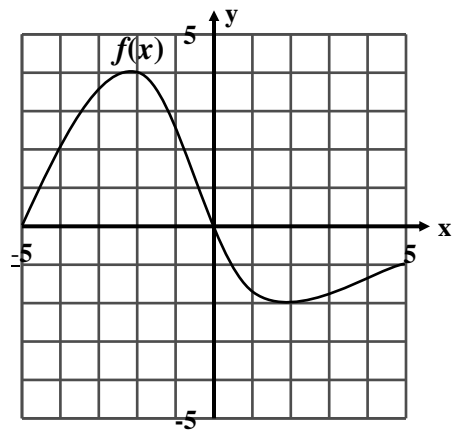
b. $f(0) =$

c. $f(3) =$

d. $f(-5) =$

e. x when $f(x) = 2$

f. x when $f(x) = 0$



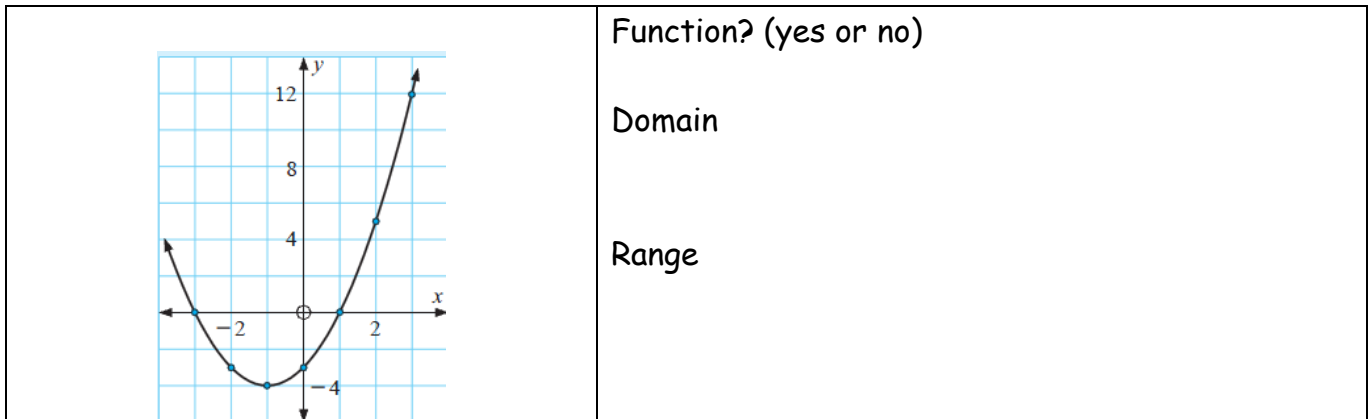
APPLICATION

5. Zombie Fever is attacking! The function below determines how many people who are zombies where $t =$ time in days and $Z =$ the number of people in thousands.

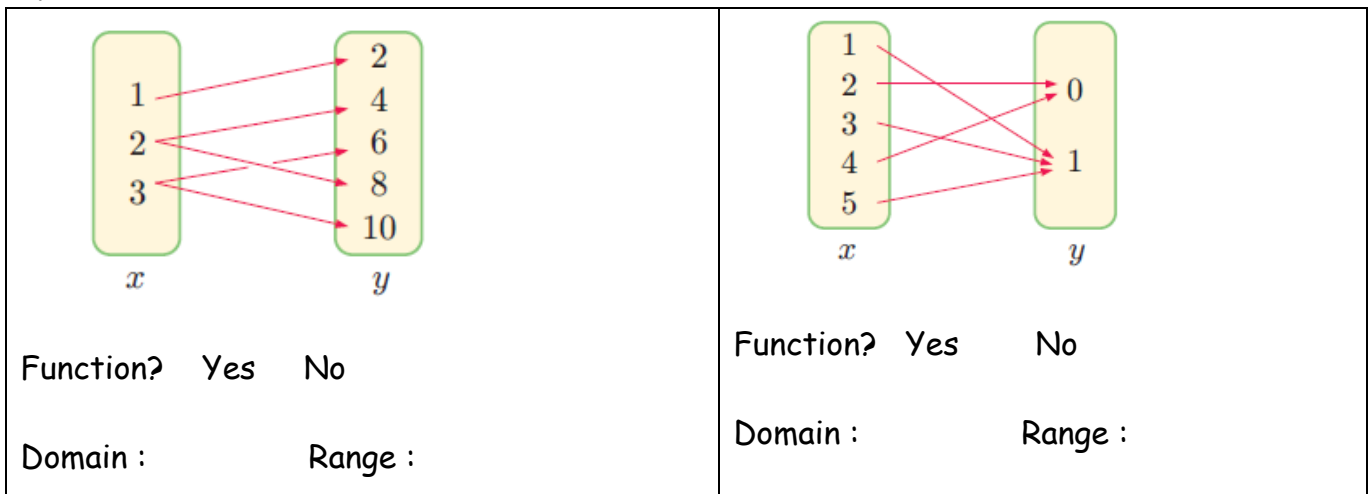
$$Z(t) = 9t - 4$$

- Find $Z(4)$.
- What does $Z(4)$ mean?
- Find t when $Z(t) = 23$.
- What does $Z(t) = 23$ mean?
- Graph the function.

6.



7.



BONUS:

Find an equation of a linear function given $h(1) = 6$ and $h(4) = -3$.