

Today we will use equations to determine specific x-values and y-values on a line.

1. If $(4, y)$ is a solution to the equation $y = -x + 3$, determine the value of y ?
2. If $(x, 10)$ is a solution to the equation $y = 3x - 2$, determine the value of x ?
3. If $(x, -4)$ is a solution to the equation $y = -\frac{1}{4}x + 3$, determine the value of x ?
4. If $(x, -4)$ is a solution to the equation $4x - 5y = 8$, determine the value of x ?

5. Determine the range of the function $f(x) = 3x - 5$ when the domain is $\{-4, 2, 9\}$?

6. Determine the range of the function $f(x) = x^2 - 8$ when the domain is $\{-4, -3, -1\}$?

7. Determine the domain of the function $f(x) = 2x + 1$ when the range is $\{-3, 9, 15\}$?

8. Determine the domain of the function $f(x) = 4x + 9$ when the range is $\{5, 21, 33\}$?