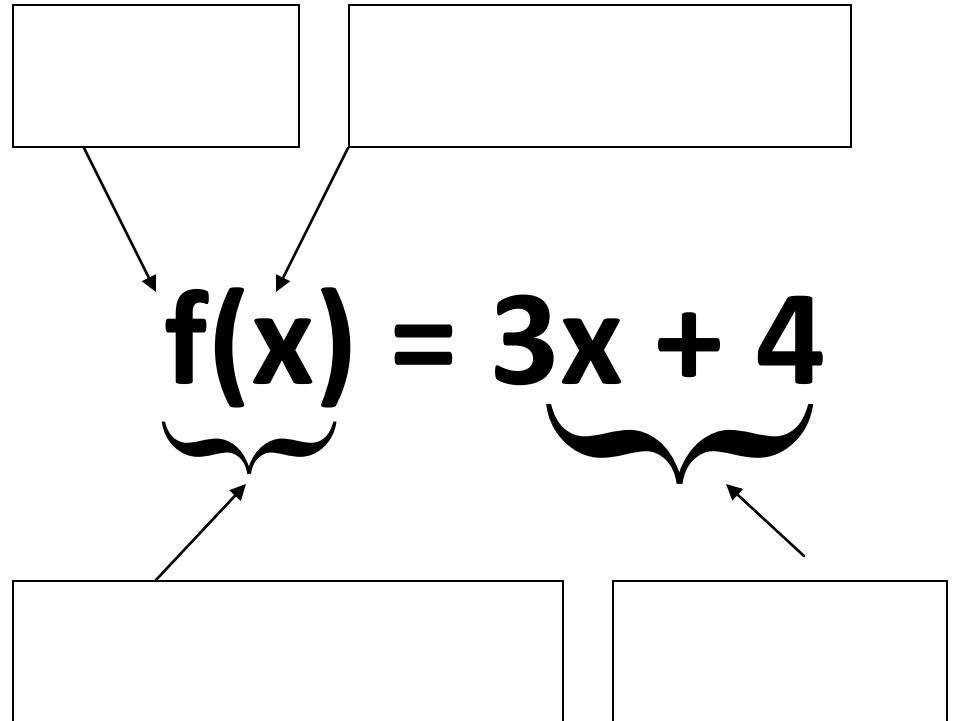
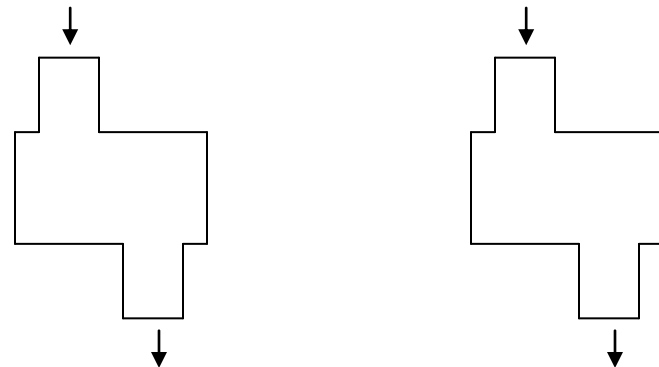


# Function Machines & Function Notation

A function can be thought of as a \_\_\_\_\_ that assigns \_\_\_\_\_ to \_\_\_\_\_.



Find and illustrate  $f(2)$  and  $f(-1)$  using the function machines below.



Let  $f(x) = x^2 + 3$  and  $g(x) = x + 1$ .

$$f(x) = x^2 - 3x$$

Find the following values:

$f(3) =$

$g(3) =$

$f(-2) =$

$g(0) =$

$f(2) + g(1) =$

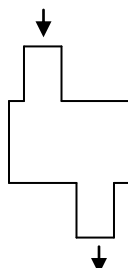
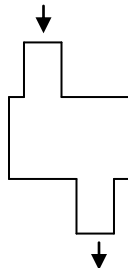
$g(-1) + f(1) =$

$f(g(2)) =$

$g(f(0)) =$

$f(y) =$

$g(w) =$



What is the value of  $f(5)$ ?

- A 4
- B 8
- C 10
- D 16

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

What is  $f(3)$ ?

- A -10
- B -8
- C 8
- D 10

If  $f(x) = 2x - 5$ , which expression represents  $f(x + 1)$ ?

- A  $2x - 3$
- B  $2x - 4$
- C  $2x - 5$
- D  $2x + 7$