Most commonly, function notation is denoted by $f(x)$. However, when referring to more than one function at a time, or when context would suggest the use of other variables, both f and x can be represented by other letters, such as $g(x)$ or $P(t)$.

Note that the variable within the brackets is always the input value, or domain, and the $g(x)$, $P(t)$, or $f(x)$ will always be the generated output value, or range.

Check Up

Three functions are given below.

$f(x) = 5x - 4$

$g(x) = \frac{3}{4}x + 10$

$d(t) = -2t - 1$

1. Evaluate the following:

   a. $f(2)$

   b. $g(-8)$

   c. $d(25)$

2. Rewrite the function $g(x) = \frac{3}{4}x + 10$ as a linear function in two variables.

☑ Compare your answers.

Three functions are given below.

$f(x) = 5x - 4$

$g(x) = \frac{3}{4}x + 10$

$d(t) = -2t - 1$

1. Evaluate the following:

   a. $f(2)$

   $f(x) = 5x - 4$
   $f(2) = 5(2) - 4$
   $f(2) = 10 - 4$
   $f(2) = 6$

   b. $g(-8)$

   $g(x) = \frac{3}{4}x + 10$
   $g(-8) = \frac{3}{4}(-8) + 10$
   $g(-8) = \frac{-24}{4} + 10$
   $g(-8) = -6 + 10$
   $g(-8) = 4$

   c. $d(25)$

   $d(t) = -2t - 1$
   $d(25) = -2(25) - 1$
   $d(25) = (-50) - 1$
   $d(25) = -51$

2. Rewrite the function $g(x) = \frac{3}{4}x + 10$ as a linear function in two variables.

   $y = \frac{3}{4}x + 10$