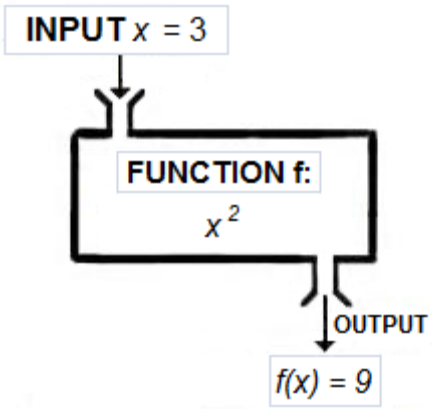
Function Notation

In algebra, we use function notation:

Non-function notation: $y = x^2$

Re-written with function notation: $f(x) = x^2$

We read this as "f of x"



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

$f(3) = 9$

$f(*) = *^2$ $\quad$ $f(\Theta) = \Theta^2$ $\quad$ $f(\forall) = \forall^2$

Let $f(x) = 2x + 1$. Find $f(-2)$, $f(0)$, $f(a)$, $f(a+h)$, $\dfrac{f(a+h) - f(a)}{h}$

Let $g(x) = 2 - x^2$. Find $g(-2)$, $g(0)$, $g(a)$, $g(a+h)$, $\dfrac{g(a+h) - g(a)}{h}$