

Types of Functions (review)

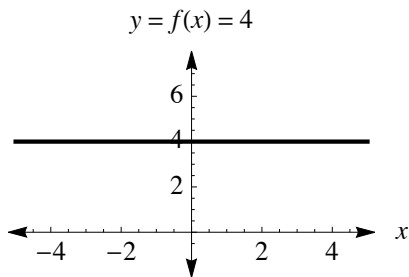
There are many different types of functions, some of which you are probably already quite familiar with, such as the equation of line. The following are some common function we will be looking at this year.

The Constant Function

A constant function is of the form

$$f(x) = b$$

where b is any real number. Examples include: $f(x) = 1$, $f(x) = 4$ and $f(x) = \pi$. The graph of a constant function is a horizontal line with y -intercept equal to the constant " b ". Here is a graph of $f(x) = 4$:



The Linear Function

The linear function is of the form

$$f(x) = mx + b$$

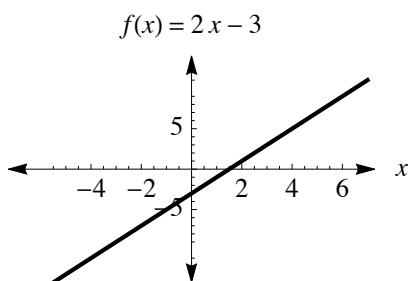
where m is any real number except 0, and b is any real number (including 0). As most probably remember, m is the slope of the line and b is the y -intercept when the function is graphed. Examples include

$$f(x) = x \text{ (the simplest linear function)}$$

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

$$f(x) = -5x - 11$$

The graph of a linear function is a line; here is a graph of $f(x) = 2x - 3$



There are other types of functions you will be learning about later this year and in Grades 11 and 12, such as quadratic, exponential, and logarithmic functions.