A limit is an observation of a function's behavior around a point or out towards infinity.

The goal of determining functions is to find what the y-values of a function are approaching for the x-value in question.

In other words, you are trying to find how the function is behaving.

Determine:
\[ \lim_{x \to 3} x^2 - x + 1 \]

(say this to yourself in English, substituting words for the symbols)

This function looks like:

Limits toward constants

\[ \lim_{x \to 2} f(x) = 3 \]
Note that f(x) is undefined when x is exactly 2 but there is a limit.

Limits toward infinity

Limits can tell us how a function is behaving way out towards infinity.

What is "?" in the table?