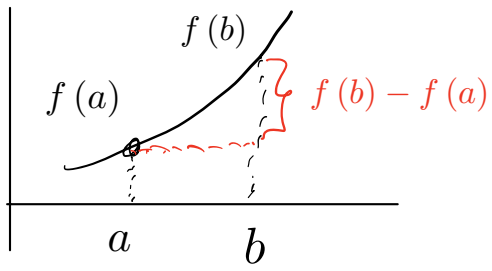
What is the average rate of change? The average rate of change is a slope for any given functions between two points?
How to find the average age of change for a given function between two points when you are given two points find the function values, and that difference will be their major divide by the difference of those two points at the denominator .

Average rate of change formula $= \dfrac{f(b) - f(a)}{b - a}$



Example one :
For the given function

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

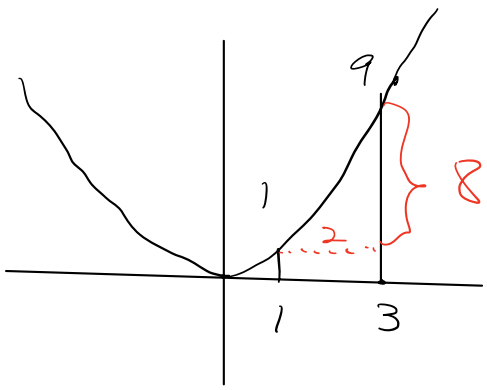
Find out of change between these two points $x = 1$ and $x = 3$

$x = 1 \qquad f(1) = (1)^2 = 1$

$x = 3 \qquad f(3) = (3)^2 = 9$

A R C = Avg. Rate of change

$$= \frac{f(3) - f(1)}{3 - 1} = \frac{9 - 1}{3 - 1} = \frac{8}{2} = 4$$



Find the average rate of change for this function, between these two points.

$f(x) = \sqrt{x} - 1 \qquad x = 4 \qquad x = 9$

$f(4) = \sqrt{4} - 1 = 1$

$f(9) = \sqrt{9} - 1 = 3 - 1 = 2$

$$ARC = \frac{f(9) - f(4)}{9 - 4} = \frac{2 - 1}{5} = 1/5$$