

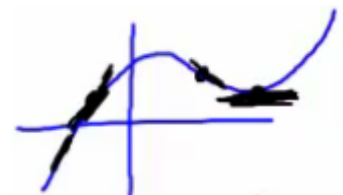
Derivative of a Function

Definition -

Process of calculating a derivative is called differentiation.

To indicate the value of a derivative a specified number $x = a$

What can we learn from the graph of $y = f'(x)$



$$\frac{d}{dx}(mx + b) =$$

A function has a derivative at a point iff

When a function does not have a derivative at a point

Theorem –

Proof If $h \neq 0$ then