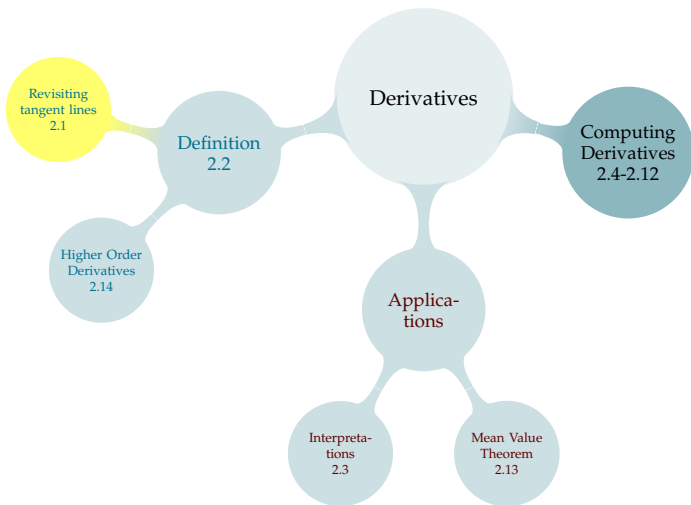# TABLE OF CONTENTS

SLOPE OF SECANT AND TANGENT LINE
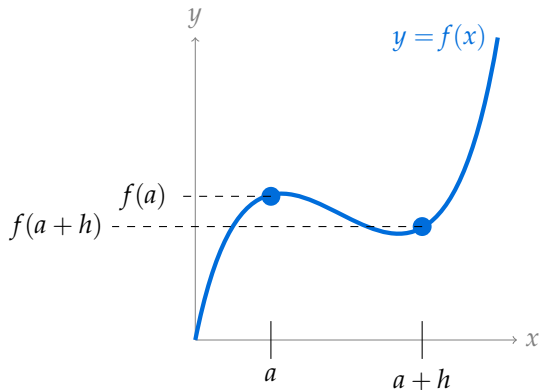
Slope

Recall, the slope of a line is given by any of the following:

$$\frac{\text{rise}}{\text{run}} \qquad \frac{\Delta y}{\Delta x} \qquad \frac{y_2 - y_1}{x_2 - x_1}$$

$y = f(x)$

$f(a)$

$f(a + h)$

a

$a + h$

x

Slope of secant line: $\frac{f(a+h)-f(a)}{h}$

Slope of tangent line: $\lim\limits_{h \to 0} \frac{f(a+h)-f(a)}{h}$