## 1.3 Rates of change

Average rate of change in y with respect to x over teh interval from x=a to x=a+h is the slope of the secant] with endpoints (a, f(a)) and (a + h, f(a + h))

instant rate of change with respect ox at x/a is the slope of the tangent at the point (a, f(a))

$$\lim_{h \to 0} = \frac{f(a) - f(a+h)}{h}$$

must be able to do with

- polynomial functions
- $\bullet$  rational
- radical functions (multiply by the conjugate)

remember rates at the end of IROC / AVROC questions