

Formula sheet

$$\frac{d}{dx} \arcsin x = \frac{1}{\sqrt{1-x^2}}$$

$$\frac{d}{dx} \arccos x = -\frac{1}{\sqrt{1-x^2}}$$

$$\frac{d}{dx} \arctan x = \frac{1}{1+x^2}$$

$$\frac{d}{dx} \log_b x = \frac{1}{\ln(b)x}$$

$$\frac{d}{dx} \tan x = \sec^2 x$$

$$\frac{d}{dx} \sec x = \tan x \sec x$$

$$\frac{d}{dx} \left(\frac{n(x)}{d(x)} \right) = \frac{n'(x)d(x) - n(x)d'(x)}{(d(x))^2}$$

Indeterminate forms: ε and δ are infinitesimal, H and K are infinite.

$$\varepsilon/\delta \quad H/K \quad \varepsilon \cdot H \quad H + K$$

$$y = m(x - x_0) + y_0$$