

ឃ- ឃឃឃ y = cotan(x)

$$y = \cotan x$$

$$y = \frac{\cos x}{\sin x} \Rightarrow y' = \frac{-\sin^2 x - \cos^2 x}{\sin^2 x}$$

$$y' = \frac{-1}{\sin^2 x} = -\frac{1}{\sin^2 x}$$

$$y' = -\frac{\sin^2 x + \cos^2 x}{\sin^2 x}$$

$$y' = -\left(1 + \frac{\cos^2 x}{\sin^2 x}\right)$$

$$y' = -(1 + \cotan^2 x)$$

$y = \cotan x \Rightarrow y' = -(1 + \cotan^2 x)$

(F-VII-05)