

គ- ដេរីវេនៃ  $y = \tan x$

$$y = \tan x = \frac{\sin x}{\cos x} \quad ( y \text{ មានទំរង់ } \frac{u}{v} )$$

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

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

$$y' = \frac{\cos^2 x + \sin^2 x}{\cos^2 x} = \frac{1}{\cos^2 x} = 1 + \tan^2 x$$

$y = \tan x \quad \Rightarrow \quad y' = 1 + \tan^2 x$
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( F-VII-04 )