

Derivative of tangent functions

Given $y = x \tan^2 x$, find $\frac{dy}{dx}$

$$u = \quad \quad \quad v = \tan^2 x = (\tan x)^2$$

$$u' = \quad \quad \quad v' =$$

Apply product rule

$$y' = uv' + vu'$$

$$y' =$$

$$y' = \quad \quad \quad + \tan^2 x$$