

$$\frac{d}{dy}(y \sec x) = \frac{d}{dy}(7x \tan y)$$

$$\Rightarrow y \cdot \sec x \tan x \cdot x' + \sec x \cdot 1 = 7x \cdot \sec^2 y + 7 \tan y \cdot x'$$

$$\Rightarrow y \sec x \tan x \cdot x' - 7 \tan y \cdot x' = 7x \sec^2 y - \sec x$$

$$\Rightarrow (y \sec x \tan x - 7 \tan y) x' = 7x \sec^2 y - \sec x$$

$$\Rightarrow x' = \frac{dx}{dy} = \frac{7x \sec^2 y - \sec x}{y \sec x \tan x - 7 \tan y}$$