

YT 7 (14) $y = e^{\sec \theta}$

$$y' = e^{\sec \theta} \cdot \sec \theta \tan \theta$$

* (15) $y = e^{\sec(3\theta)}$

$$y' = e^{\sec(3\theta)} \cdot \sec 3\theta \tan 3\theta \cdot 3$$

$$3 e^{\sec(3\theta)} \cdot \sec 3\theta \tan 3\theta$$

* (16) $y = \sin(\cos(\tan x))$

YT 8 ✓ $y' = \cos(\cos(\tan x)) \cdot$

$$-\sin(\tan x) \cdot \sec^2 x$$

$$y' = -\sec^2 x \cdot \cos(\cos(\tan x)) \cdot$$

$$\sin x \tan x$$

(17) $f(x) = \left(\frac{5x+3}{x^2-8x+1}\right)^6$ $f'(x) = 6\left(\frac{5x+3}{x^2-8x+1}\right)^5$

$$\cdot \left(\frac{(x^2-8x+1)(5) - (5x+3)(2x-8)}{(x^2-8x+1)^2}\right)$$

OR

$$f(x) = (5x+3)^6 \cdot (x^2-8x+1)^{-6}$$

$$(5x+3)^6 \cdot 6(x^2-8x+1)^{-7} \cdot (2x-8) +$$

$$(x^2-8x+1)^{-6} \cdot 6(5x+3)^5 \cdot 5$$