

$$(3) x = \ln(st-4)$$

$$y = (6t^2+2)^6$$

$$\Rightarrow \therefore e^x = e^{\ln(st-4)}$$

$$e^x = (st-4)$$

$$st = e^x + 4$$

$$t = \frac{1}{s} e^x + \frac{4}{s}$$

$$t' = \frac{1}{s} e^x$$

$$\therefore y = (6t^2+2)^6$$

$$y' = 6(6t^2+2)^5 (12t) t'$$

$$= 6 \left[6 \left(\frac{1}{s} e^x + \frac{4}{s} \right)^2 + 2 \right]^5 \cdot \left[12 \left(\frac{1}{s} e^x + \frac{4}{s} \right) \right] \cdot \left[\frac{1}{s} e^x \right]$$

$$= 6 \left[6 \left(\frac{1}{s} e^x + \frac{4}{s} \right)^2 + 2 \right]^5 \cdot \left[12 \left(\frac{e^x + 4}{s} \right) \right] \cdot \left[\frac{1}{s} e^x \right] //$$

$$(4) x = e^{(st-4)}$$

$$y = \sec(t^2)$$

$$\Rightarrow \therefore x = e^{(st-4)}$$

$$\ln x = \ln e^{(st-4)}$$

$$\ln x = (st-4) \ln e$$

$$st = \ln x + 4$$

$$t = \frac{1}{s} \ln x + \frac{4}{s}$$

$$t' = \frac{1}{s} \cdot \frac{1}{x}$$

$$\therefore y = \sec(t^2)$$

$$y' = \sec(t) \cdot \operatorname{tg}(t) \cdot 2t \cdot t'$$

$$= \sec \left(\frac{1}{s} \ln x + \frac{4}{s} \right) \cdot \operatorname{tg} \left(\frac{1}{s} \ln x + \frac{4}{s} \right) \cdot 2 \left(\frac{1}{s} \ln x + \frac{4}{s} \right) \cdot \left(\frac{1}{s} \cdot \frac{1}{x} \right) //$$