

$$52 \quad a) \quad y' = 2^{x^4-x} \ln 2 (4x^3-1)$$

$$b) \quad y' = 3x^2 + 3^x \ln 3$$

$$c) \quad f'(x) = 5x^4 e^x + x^5 e^x$$

$$d) \quad y' = 10^{\tan \pi x} \ln 10 (\sec^2 \pi x) (\pi)$$

$$53: \quad y' = 1 - \frac{1}{x}$$

$$y'(1) = 1 - 1 = 0$$

$$\frac{-1}{0} = \frac{y-0}{t-1}$$

$$t m = \frac{-1}{0}$$

$$-x + 1 = 0$$