

abu. 2 /

$$6r) f(x) = e^{x+e^x} = e^x \cdot e^{e^x} = (e^{e^x})'$$

$$f'(x) \cdot e^{f(x)} = (e^{f(x)})'$$

$$j) e^{x^2 + \ln x} = e^{x^2} \cdot e^{\ln x} = x \cdot e^{x^2} = \frac{1}{2} \cdot (x^2)' \cdot e^{x^2} = \left(\frac{1}{2} \cdot e^{x^2}\right)'$$

$$n) \frac{x^2}{x^6 + 2x^3 + 1} = \frac{x^2}{(x^3 + 1)^2} = \frac{1}{3} \frac{(x^3)'}{(x^3 + 1)^2} = \frac{(x^3 + 1)'}{3 \cdot (x^3 + 1)^2} = \left(-\frac{1}{3} \cdot \frac{1}{x^3 + 1}\right)'$$

$$i) \frac{\ln x - 2}{x \sqrt{\ln x}} = \frac{\ln x}{x \sqrt{\ln x}} - \frac{2}{x \sqrt{\ln x}} = \sqrt{\ln x} \cdot (\ln x)' - \frac{4}{2\sqrt{\ln x}} \cdot (\ln x)'$$

$$\ln x = f(x) \quad f'(x) \frac{f(x) - 2}{\sqrt{f(x)}} = f'(x) \frac{\sqrt{f(x)}}{\sqrt{f(x)}} - \frac{2}{\sqrt{f(x)}} \cdot f'(x) \quad \left| \left(\frac{2}{3} (\ln x)^{3/2} - 4 \sqrt{\ln x}\right)'\right.$$