

Product Rule / Quotient Rule WS 2

$$1) y = \frac{x^3 e^x}{3 \ln(x)}$$

$$2) f(x) = \frac{5e^{2x}}{4\sqrt{x}}$$

$$3) y = \frac{(x^4 - 12x^2 + 35)(x^3 + 14x - 3)}{6 \cos(x)}$$

$$4) f(x) = \frac{(9x^4 - \frac{6}{\sqrt{x}})(10 \tan(x))}{9e^x}$$

$$5) y = \frac{(7x - e^x)}{\sqrt{x}(x^3 - 2)}$$

$$6) f(x) = 16 + 2^x(2x^4 - 3x)$$

$$7) y = \frac{e^x + \frac{6}{x^3 + 1}}{x}$$

$$8) f(x) = \frac{2x^4 - 5x}{e^x(x^2 + 7)}$$