

Nr. 4) richtig gerechnet

$$A) 3 + e^x = 6 \quad | -3 \Rightarrow e^x = 3 \quad | \ln \Rightarrow \underline{\underline{x = \ln(3) \approx 1,099}}$$

$$B) F(x) = e^{3x}$$

$$\underline{\underline{F'(x) = e^{3x} \cdot 3 = 3 \cdot e^{3x}}}$$

$$C) F(x) = 2x \cdot e^{3x}$$

$$\underline{\underline{F'(x) = 2 \cdot e^{3x} + 2x \cdot e^{3x} \cdot 3 = e^{3x}(2 + 6x) = 2 \cdot e^{3x}(1 + 3x)}}$$

$$D) \underline{\underline{\ln(e^3 \cdot e^5) = \ln(e^{3+5}) = \ln(e^8) = 8}}$$