

3.3 19, 24, 27, 30, 34.

$$19. \frac{d}{dx} (e^{5x}) = 5e^{5x}$$

$$24. \frac{d}{dx} (\ln|3x-4|) = \frac{3}{3x-4}$$

$$27. \frac{d}{dx} \left(\frac{e^x + e^{-x}}{2} \right) = \frac{e^x - e^{-x}}{2}$$

$$30. \frac{d}{dx} \left(\frac{e^x}{e^x + 1} \right) = \frac{d}{dx} \left(1 - \frac{1}{e^x + 1} \right) = \frac{+e^x}{(e^x + 1)^2}$$

$$34. \frac{d}{dx} (x \cdot \ln(x) - x) = \ln(x) + \frac{x}{x} - 1 = \ln(x)$$