

Study Guide Corrections

$$\begin{aligned} \boxed{3.1} \quad 1a.) \quad & \lim_{x \rightarrow 0} \frac{(2x-3)x}{x} \\ & = 2(0) - 3 \\ & = -3 \end{aligned}$$

$$\begin{aligned} \boxed{3.3} \quad 7.) \quad & y = 5e^{-3x} + 5x^6 - \sqrt{x} \\ & y' = -15e^{-3x} + 5x^6 - \sqrt{x} \end{aligned}$$

$$\begin{aligned} \boxed{3.3} \quad 10.) \quad & f'(x) = 48x^3 - 15x^2 + 6x \\ & f'(-2) = 48(-2)^3 - 15(-2)^2 + 6(-2) \\ & = -456 \end{aligned}$$