

$$6. y = 9x^2 - 4x + 2$$

$$\frac{dy}{dx} = 18x - 4$$

$$dy = (18x - 4) dx$$

$$7. y = \frac{x-3}{x+5} \quad \begin{matrix} P \\ Q \end{matrix} \quad \begin{matrix} P' = 1 \\ Q' = 1 \end{matrix}$$

$$\frac{P'Q - PQ'}{Q^2}$$

$$\frac{dy}{dx} = \frac{1(x+5) - (x-3) \cdot 1}{(x+5)^2}$$

$$dy = \left( \frac{x+5 - x+3}{(x+5)^2} \right) dx$$

$$dy = \left( \frac{8}{(x+5)^2} \right) dx$$