

$$y = \ln f \xrightarrow{\text{Regra}} y' = \frac{1}{f} \cdot f'$$

$$y = \ln x_2 \longrightarrow y' = \frac{1}{x_2} \cdot 1 = \frac{1}{x_2}$$

$$y = \ln (x_1 + 5) \longrightarrow y' = \frac{1}{x_1 + 5} \cdot 1 = \frac{1}{x_1 + 5}$$

$$y = \ln (x_2 - 7) \longrightarrow y' = \frac{1}{x_2 - 7}$$

$$y = \ln (3x_1^5 + 6) \longrightarrow y' = \frac{1}{3x_1^5 + 6} \cdot 15x_1^4$$

$$y = \ln (2x_1 + 3) \longrightarrow y' = \frac{1}{2x_1 + 3} \cdot 2 = \frac{2}{2x_1 + 3}$$

$$y' = \frac{15x_1^4}{3x_1^5 + 6}$$

$$\frac{1}{2} - 1 = -\frac{1}{2} \quad \frac{1}{3} - 1 = -\frac{2}{3}$$

$$y = (f)^n \rightarrow y' = n(f)^{n-1} \cdot f'$$

$$y = (x_2 - 3)^{10} \rightarrow y' = 10(x_2 - 3)^9 \cdot 1$$

$$y = (x_1 + 4)^{1/2} \rightarrow y' = \frac{1}{2}(x_1 + 4)^{-1/2} \cdot 1$$

$$y = (x_2 - 3)^{1/3} \rightarrow y' = \frac{1}{3}(x_2 - 3)^{-2/3} \cdot 1$$

$$y = (3x_1 + 1)^{1/3} \rightarrow y' = \frac{1}{3}(3x_1 + 1)^{-2/3} \cdot 3$$

$$y = (2x_2^3 - 3)^{1/2} \rightarrow y' = \frac{1}{2}(2x_2^3 - 3)^{-1/2} \cdot 6x_2^2$$

$$y = (4x_1 - 2)^{1/5} \rightarrow y' = \frac{1}{5}(4x_1 - 2)^{-4/5} \cdot 4$$

$$y = (2x_1^3 - 7)^{1/5} \rightarrow y' = \frac{1}{5}(2x_1^3 - 7)^{-4/5} \cdot 6x_1^2$$

$$\frac{1}{5} - 1 = -\frac{4}{5}$$











