

\* Solución

$$\int_{-1}^0 x^{\frac{1}{3}} - x^{\frac{2}{3}} dx = \int_{-1}^0 x^{\frac{1}{3}} dx - \int_{-1}^0 x^{\frac{2}{3}} dx$$

$$= \frac{x^{\frac{1}{3} + \frac{2}{3}}}{\frac{1}{3} + \frac{2}{3}} - \frac{x^{\frac{2}{3} + \frac{3}{3}}}{\frac{2}{3} + \frac{3}{3}} \Big|_{-1}^0$$

$$\int x^n dx = \frac{x^{n+1}}{n+1}$$

$$= \frac{x^{\frac{4}{3}}}{\frac{4}{3}} - \frac{x^{\frac{5}{3}}}{\frac{5}{3}} \Big|_{-1}^0 = \frac{3}{4} x^{\frac{4}{3}} - \frac{3}{5} x^{\frac{5}{3}} \Big|_{-1}^0$$

$$\frac{3}{4} (0^{\frac{4}{3}} - (-1^{\frac{4}{3}})) - \frac{3}{5} (0^{\frac{5}{3}} - (-1^{\frac{5}{3}}))$$

$$\frac{3}{4} (-1) - \frac{3}{5} (-(-1)) = \frac{3}{4} (-1) - \frac{3}{5} (1)$$

$$= -\frac{3}{4} - \frac{3}{5} = -\frac{27}{20} = -1.35$$