EXERCÍCIO 3

Calcule a primeira derivada da função f(x) a seguir:

$$\sqrt[c]{a^b} = a^{\frac{b}{c}}$$

$$f(x) = \frac{4}{x^1} + 3\sqrt[2]{x^1} - 2\cos(x)$$

$$f(x) = 4 \cdot x^{-1} + 3x^{\frac{1}{2}} - 2 \cdot \cos x$$

$$f'(x) = -1 \cdot 4 \cdot x^{-1-1} + 3 \cdot \frac{1}{2} x^{\frac{1}{2}-1} - 2 \cdot (-\operatorname{sen} x) =$$

$$= -4x^{-2} + \frac{3}{2} x^{-\frac{1}{2}} + 2\operatorname{sen} x =$$

$$= -4 \cdot \frac{1}{x^2} + \frac{3}{2} \cdot \frac{1}{x^{1/2}} + 2\operatorname{sen} x =$$

$$= -\frac{4}{x^2} + \frac{3}{2\sqrt{x}} + 2\operatorname{sen} x$$