Riemann Sum Practice

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$$\Delta x = \frac{b-a}{n} = \frac{2-0}{6} = \frac{1}{3}$$

$$c_1 = \frac{1}{3},\ c_2 = \frac{2}{3},\ \cdots,\ c_6 = \frac{6}{3}$$

$$f(c_1) = 3,\ f(c_2) = 4,\ \cdots,\ f(c_6) = 8$$

$$\sum_{i=1}^{6} f(c_i)\Delta x = \Delta x \sum_{i=1}^{6} f(c_i)$$

$$= \frac{1}{3}(3 + 4 + \cdots + 8)$$

$$= \frac{1}{3}\left(\frac{6}{2}(3+8)\right)$$

$$= 11$$