

2  $f(x) = x^3 + 2x - 1$  entre os pontos.

a) 1 e 3

$$\left. \begin{array}{l} f(x_0) = 1 \\ f(x_0 + \Delta x) = 3 \end{array} \right\} \Delta x = 2$$

$$\left. \begin{array}{l} f(x_0) = f(1) = 1^3 + 2 \cdot 1 - 1 = 2 \\ f(x_0 + \Delta x) = f(3) = 3^3 + 2 \cdot 3 - 1 = 32 \end{array} \right\}$$

$$\Delta MV = \frac{f(x_0 + \Delta x) - f(x_0)}{\Delta x}$$

$$\Delta MV = \frac{32 - 2}{2} = \frac{30}{2} = 15 //$$

b) 2 e 5

$$\left. \begin{array}{l} f(x_0) = 2 \\ f(x_0 + \Delta x) = 5 \end{array} \right\} \Delta x = 3$$

$$\left. \begin{array}{l} f(x_0) = f(2) = 2^3 + 2 \cdot 2 - 1 = 11 \\ f(x_0 + \Delta x) = f(5) = 5^3 + 2 \cdot 5 - 1 = 134 \end{array} \right\}$$

$$\Delta MV = \frac{f(x_0 + \Delta x) - f(x_0)}{\Delta x}$$

$$\Delta MV = \frac{134 - 11}{3} = \frac{123}{3} = 41 //$$