

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

$$f'(x) = \frac{16}{3}x^3 - 4x^2 + x$$

$$f'(0) = 0, \quad f'(7) = \frac{16}{3} - \frac{12}{3} + \frac{7}{3} = \frac{7}{3}$$