

$$x_0 = 0,5 \quad h = 0,1$$

$$f(x) = 0,25x^4 - 0,35x^2 + 2,5$$

$$f'(x) = x^3 - 0,7x$$

$$f''(x) = 3x^2 - 0,7$$

$$x_0 = 0,5 \quad f(0,5) = 2,428125$$

$$x_{i+1} = 0,6 \quad f'(0,5) = -0,225$$

$$x_{i-1} = 0,4 \quad f''(0,5) = 0,05$$

$$x_{i-2} = 0,3$$

$$f(0,6) = 2,4064 \quad f(0,3) = 2,470525$$

$$f(0,4) = 2,4504$$

centrada

$$f'(0,5) \approx \frac{2,4064 - 2,4504}{2(0,1)}$$

$$f'(0,5) \approx -0,22$$

$$f''(0,5) \approx \frac{2,4064 - 2(2,428125) + 2,4504}{0,01}$$

$$f''(0,5) \approx 0,055$$



$f_{\text{tras}}$

$$f'(0,5) \equiv \frac{(2,428125) - 2,4504}{0,1}$$

$$f'(0,5) \approx -0,22275$$

$$f''(0,5) \equiv \frac{(2,428125) - 2(2,4504) + 2,470575}{0,01}$$

$$f''(0,5) \approx -0,2755$$



$$x = 0,5 \quad h = 0,05$$

$$f(x) = 0,25x^4 - 0,35x^2 + 2,5$$

$$f'(x) = x^3 - 0,7x$$

$$f''(x) = 3x^2 - 0,7$$

$$x_i = 0,5$$

$$f(0,5) = 2,428125$$

$$x_{i+1} = 0,55$$

$$f'(0,55) = -0,225$$

$$x_{i-1} = 0,45$$

$$f''(0,5) = 0,05$$

$$f(0,55) = 2,41700$$

$$f(0,45) = 2,43937$$

Centrada

$$f'(0,5) \approx \frac{2,43937 - 2,41700}{2(0,05)}$$

$$f'(0,5) = 0,2237$$

$$f''(0,5) \approx \frac{2,41700 - 2(2,428125) + 2,43937}{(0,05)^2}$$

$$f''(0,5) \approx 0,04799$$