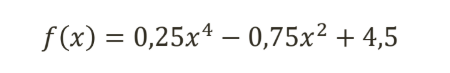
| 0.4 | f(0,4)=4.3864 |
| --- | --- |
| 0.5 | f(0.5)=4.40625 |
| 0.6 | f(0.6)=4.4324 |
| 0.7 | f(0.7)=4.4641 |
| 0.8 | f(0.8)=4.5008 |



f(0.4)=0.25(0.4)^4−0.75(0.4)^2+4.5=0.25(0.0256)−0.75(0.16)+4.5

=0.0064−0.12+4.5=4.3864

1ra derivada

f’(x)=f′(x)=(0.25⋅4x^3)−(0.75⋅2x)

f′(x)=x3−1.5x

2da derivada

f′′(x)=3x2−1.5

x=0,6

f′(0.6)=(0.6)^3−1.5(0.6)=0.216−0.9

=−0.684

f′′(0.6)=3(0.6)^2−1.5=3(0.36)−1.5=1.08−1.5=

−0.42

Diferencia hacia adelante 0,6

f’(0,7)-(0,6)/0.1=0.317

Diferencia hacia atras

f’(0,6)-(0,5)/0.1=0.2615

2da derivada

f(x+h)−2f(x)+f(x−h)

f’’(0.6)=4.4641−2(4.4324)+4.40625​/(0.1)^2

=−0.555