

materia:

fecha:

Tarea 1

1. Resolución

A. $x^3 - 6x^2 + 11x - 6.1 = 0$, $x_0 = 2$, $x_1 = 3.2$

$f(x) = x^3 - 6x^2 + 11x - 6.1$

$x_{n+1} = x - \frac{(x^3 - 6x^2 + 11x - 6.1)}{f'(x)} = \frac{3.2 + 2}{f'(2.2) - f'(3.2)}$

x	A	y	B
x_{n-1}	$f(x_{n-1})$	x_n	$f(x_n)$
2	-0.1	3.2	0.428

2.2 0.428 2.22727 -0.3155 3.01577

2.22727 -0.3155 3.01577 -0.0677 2.37661

3.01577 -0.0677 2.37661 -0.42319 2.8947169

2.37661 -0.42319 2.8947169

x_{n-1}	$f(x_{n-1})$	x_n	$f(x_n)$	x_{n+1}
2	-1.155353	3	3.048221	2.27850
3	3.048221	2.27850	-0.250478	2.330132
2.27850	-0.250478	2.330132	-0.039739	2.340557
2.330132	-0.039739	2.340557	0.000986	2.340305
2.340557	0.000986	2.340305	-0.000002	2.340305

materia:

fecha:

$$D, 12x = 3, 41691x = 0 \quad 1x_0 = 2 \quad 1x_1 = 3$$

$$x \quad f(x) \quad y \quad f(y) \quad x_{n+1}$$

$$2 \quad 2,23311 \quad 3 \quad 3,04822 \quad 2,27485$$

$$2 \quad 2,1955 \quad 3 \quad 3,04822 \quad 2,27485$$

$$3 \quad 3,04822 \quad 2,27485 \quad 0,280477 \quad 2,329912$$

$$2,27485 - 0,280477 \quad 2,329912 \quad 4,75555 \quad 2,340562$$

$$2,329912 - 0,040945 \quad 2,340562 \quad 1,0962 \cdot 10^{-5} \quad 2,34030496$$

$$2,340562 \quad 1,0962 \cdot 10^{-5} \quad 2,34030496 \quad -4,09546 \cdot 10^{-6} \quad 2,3403054$$

$$2,34030496 \quad -4,09546 \cdot 10^{-6} \quad 2,3403054 \quad -1,52914 \cdot 10^{-9} \quad 2,34030541$$