

E02 FREDERICO MINUTI ANNOO01

IIQ03

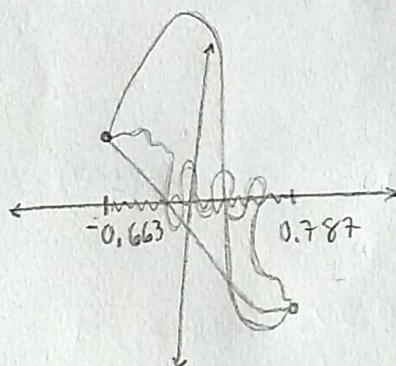
Posição Falsa ; ESTIMATIVA INICIAL  $a_1: -0,663$   
 $b_1: 0,787$

$$f(x) = x^3 - 4x - 1 \quad p_1: ?$$

\* CONTINUA? ✓

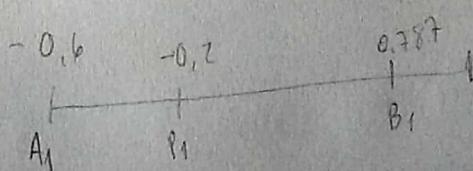
\* TESTE:

$$\begin{aligned} f(a_1) &= 1,360565753 && \text{ouve uma} \\ f(b_1) &= -3,660556597 && \text{mudança de} \\ &&& \text{sinal.} \end{aligned}$$



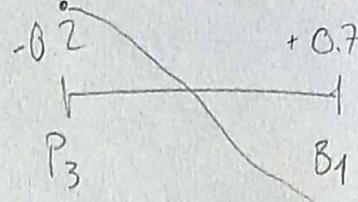
$$P_1 = \frac{(-0,663 \cdot -3,660556597) - (0,787 \cdot 1,360565753)}{-3,660556597 - 1,360565753} = -0,269553807$$

$$f(P_1) = 0,05862964924$$



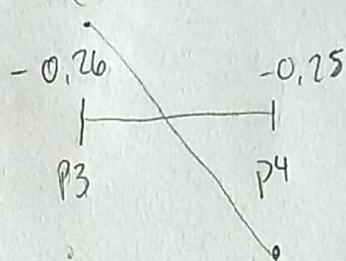
$$P_1 = -0.269553807$$

$$f(P_1) = 0.05862964924$$



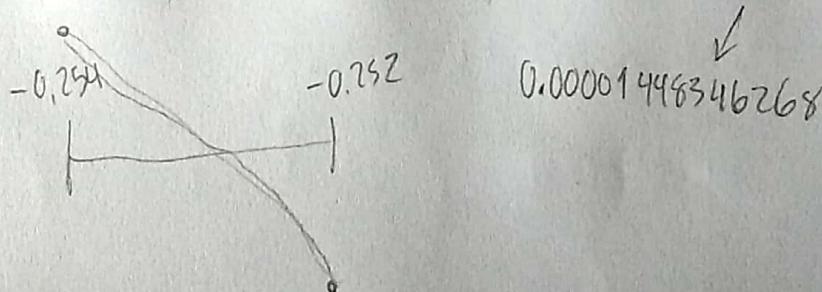
$$P_2 = \frac{-0.269553807 \cdot -3.660556597 - 0.787 \cdot 0.05862964924}{-3.660556597 - 0.05862964924}$$

$$= -0.2528981799 \quad f(P_4) = -0.004582013059,$$



$$P_3 = \frac{-0.269553807 \cdot -0.004582013059 - (-0.2528981799 \cdot 0.05862964924)}{-0.004582013059 - 0.05862964924}$$

$$= -0.2541054935 \quad f(P_5) = 1.448346268 \times 10^{-5}$$



$$P_4 = \frac{-0.2528981799 \cdot 0.00001448346268 - (-0.004582013059 \cdot -0.2541054935)}{0.00001448346268 - 0.004582013059}$$

$$= -0.2541016893 \quad \textcircled{A}$$