

Maximos / Minimos / Función Creciente  
función decreciente / Gráfica

1  $y = -3x^2 - 5x + 6$

$$y' = -6x - 5$$

$$-6x - 5 = 0$$

$$-6x = -5$$

$$x = \frac{-5}{-6}$$

$$x = -0,83 \quad \text{Maximo}$$

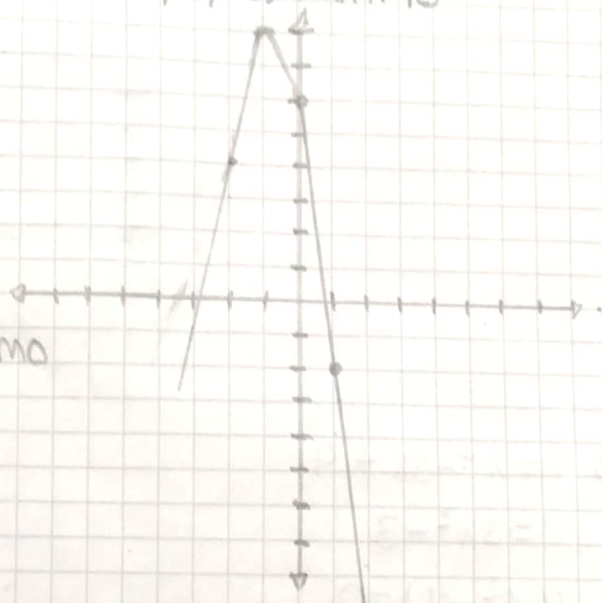
$$y = -3(-0,83)^2 - 5(-0,83) + 6$$

$$y = 6,08$$

$$y' = -6x - 5$$

$$y' = -6 \quad \text{Maximo}$$

$$(-0,83, 6,08) \quad \text{Maximo}$$



2  $f(x) = 2x^3 - 2x^2 - 16x + 7$

$$f(x)' = 6x^2 - 4x - 16$$

$$f(x)' = 0 \rightarrow 2(3x + 4)(x - 2)$$

$$x = \frac{-4}{3} = -1,33$$

$$x = 2$$

$$x = 0$$

$$f(-4/3)' = 2(-1,33)^3 - 2(-1,33)^2 - 16(-1,33) + 7$$

$$f(-4/3)' = 14,036$$

$$f(2) = 2(2)^3 - 2(2)^2 - 16(2) + 7$$

$$f(2) = -23$$

$$3 \quad y = x^3 - 3x + 4$$

$$y' = 3x^2 - 3$$

$$3(x^2 - 1) = 0$$

$$(x-1)(x+1)$$

$$x-1=0 \quad x+1=0$$

$$x_1 = 1 \quad x_2 = -1$$

$$y_1 = 2 \quad y_2 = 6$$

$$y_1 = (-1)^3 - 3(-1)$$