

$$y = x^3 + 4x^2 + x - 6$$

$$y \text{ int } (0, -6)$$

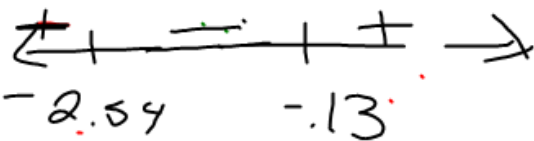
Rel max @
(-2.54, .87)

Rel min @
(-.13, 6.06)

P.O.I.
(-4/3, 2.59)

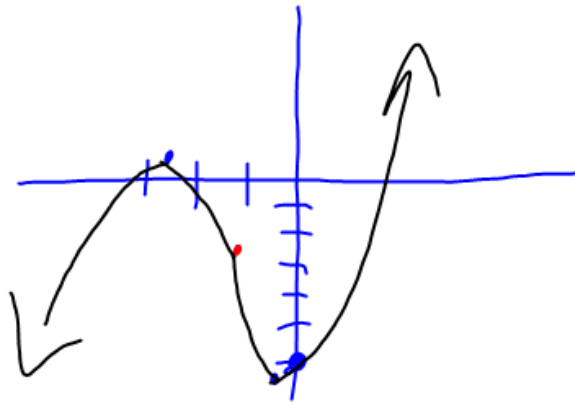
$$y' = 3x^2 + 8x + 1$$

$$x = -2.54, -.13$$



$$y'' = 6x + 8$$

$$x = -4/3$$



$$y = \frac{2x^2}{x^2 - 16}$$

$$y'' = \frac{64 \cdot (3x^2 + 16)}{(x^2 - 16)^3}$$

$$3x^2 + 16 = 0$$

$$3x^2 = -16$$

NO P.O.I

Int: $(0, 0)$

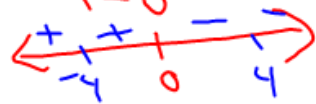
VA: $x = \pm 4$

HA: $y = 2$

$$y' = \frac{-64x}{(x^2 - 16)^2}$$

$$-64x = 0$$

$$x = 0$$



$$y''(0) < 0$$

Concave ↓

