

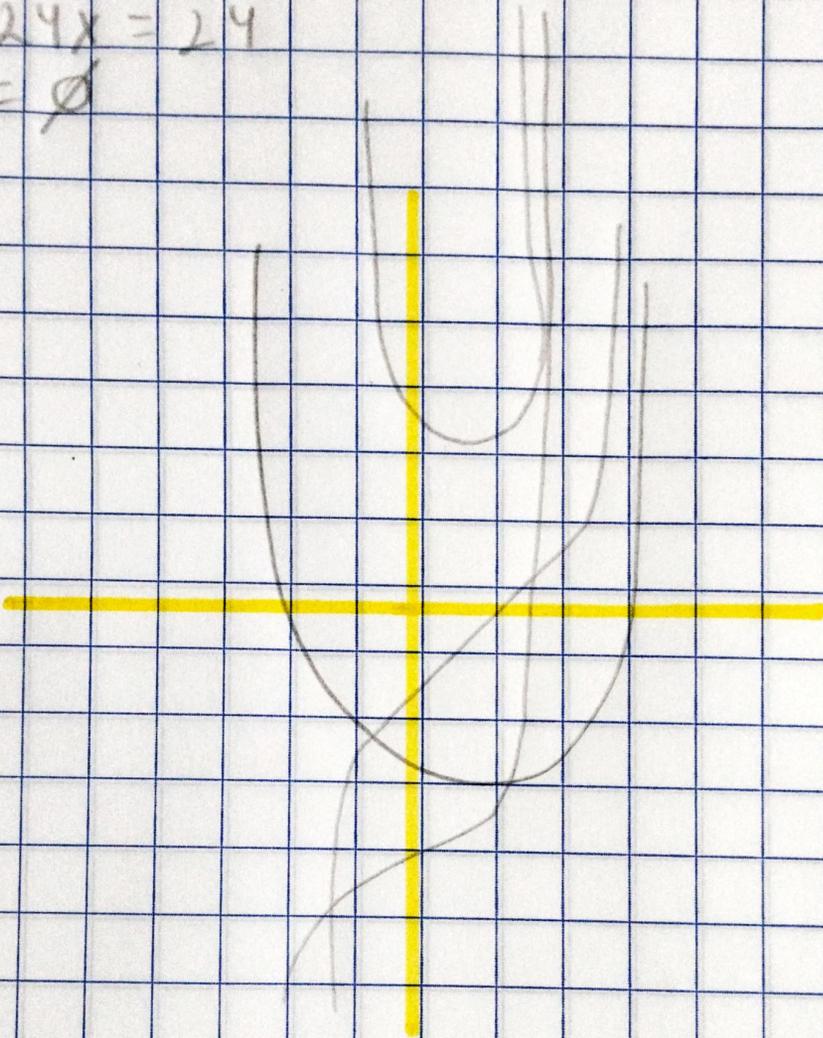
$$f(x) = x^4 + 3x^2 - 2x$$

$$f' = 4x^3 + 6x - 2$$

$$f'' = 12x^2 + 6$$

$$f''' = 24x = 24$$

$$f^{(4)} = \emptyset$$



$$f(x) = 5x^5 + x^4 + x^3 + 6x^2 + 8$$

$$f' = 25x^4 + 4x^3 + 3x^2 + 12x$$

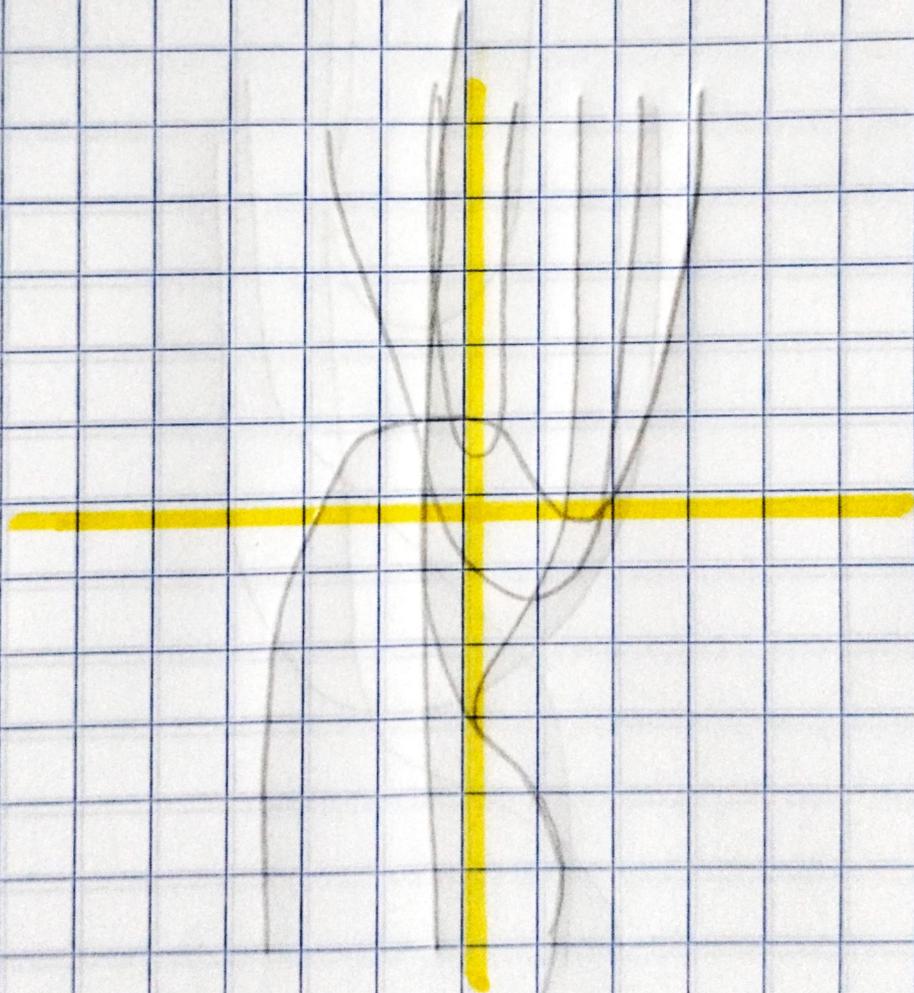
$$f'' = 100x^3 + 12x^2 + 6x + 12$$

$$f''' = 300x^2 + 24x + 6$$

$$f^{IV} = 600x + 24$$

$$f^V = 600$$

$$f = \emptyset$$



$$f(x) = -3x^2 - 5x$$

$$f' = -6x - 5$$

$$f'' = -6$$

$$f''' = 0$$

