

$$11. f(x) = \frac{-2x^3 + 4x^2 - 5x + 7}{x}$$

$$= \frac{-2x^3}{x} + \frac{4x^2}{x} - \frac{5x}{x} + \frac{7}{x}$$

$$= -\frac{2x^2}{1} + \frac{4x^1}{1} - 5 + 7x^{-1}$$

$$= -2x^2 + 4x - 5 + 7x^{-1}$$

$$f'(x) = -2 \cdot 2x^1 + 4 + 0 + 7(-1)x^{-2}$$

$$= -4x + 4 - 7x^{-2}$$

$$= -\frac{4x}{1} + \frac{4}{1} - \frac{7}{x^2}$$

$$= \frac{-4x \cdot x^2}{x^2} + \frac{4 \cdot x^2}{x^2} - \frac{7}{x^2}$$

$$= \frac{-4x^3}{x^2} + \frac{4x^2}{x^2} - \frac{7}{x^2}$$

$$= \frac{-4x^3 + 4x^2 - 7}{x^2}$$

$$12. y = 5x(x^3 - \frac{6}{x}) \text{ AT } (2, 50)$$

FIND SLOPE OF GRAPH AT A GIVEN POINT

① FIND DERIVATIVE

$$y = 5x^4 - 30$$

$$y' = 5 \cdot 4x^3$$

$$y' = 20x^3$$

② CHANGE  $y'$  TO  $m$  AND PLUG IN  $x$  PART OF POINT

$$m = 20(2)^3$$

$$m = 20(8)$$

$$m = 160$$