

3242

$$y = 2x + \frac{50}{x}$$

$$= 2x^1 + 50x^{-1}$$

$$y' = 2x^0 - 50x^{-2}$$

$$\boxed{x^0=1}$$
$$= 2 - \frac{50}{x^2}$$

$$0 = 2 - \frac{50}{x^2}$$

$$\frac{50}{x^2} = 2$$

$$50 = 2x^2$$

$$\frac{50}{2} = x^2$$

$$25 = x^2$$

$$y' = 0 \text{ för } x = \pm 5$$

$$b) \quad y = 5x + \frac{20}{x^2}$$

$$= 5x + 20x^{-2}$$

$$y' = 5 - 40x^{-3}$$

$$= 5 - \frac{40}{x^3}$$

$$y' = 0$$

$$0 = 5 - \frac{40}{x^3}$$

$$\frac{40}{x^3} = 5$$

$$40 = 5x^3$$

$$\frac{40}{5} = x^3$$

$$\begin{array}{l} 8 = x^3 \\ x = 2 \end{array}$$

OBS! $e_j = -2$

$$(-2)^3 = -8 \quad \checkmark$$