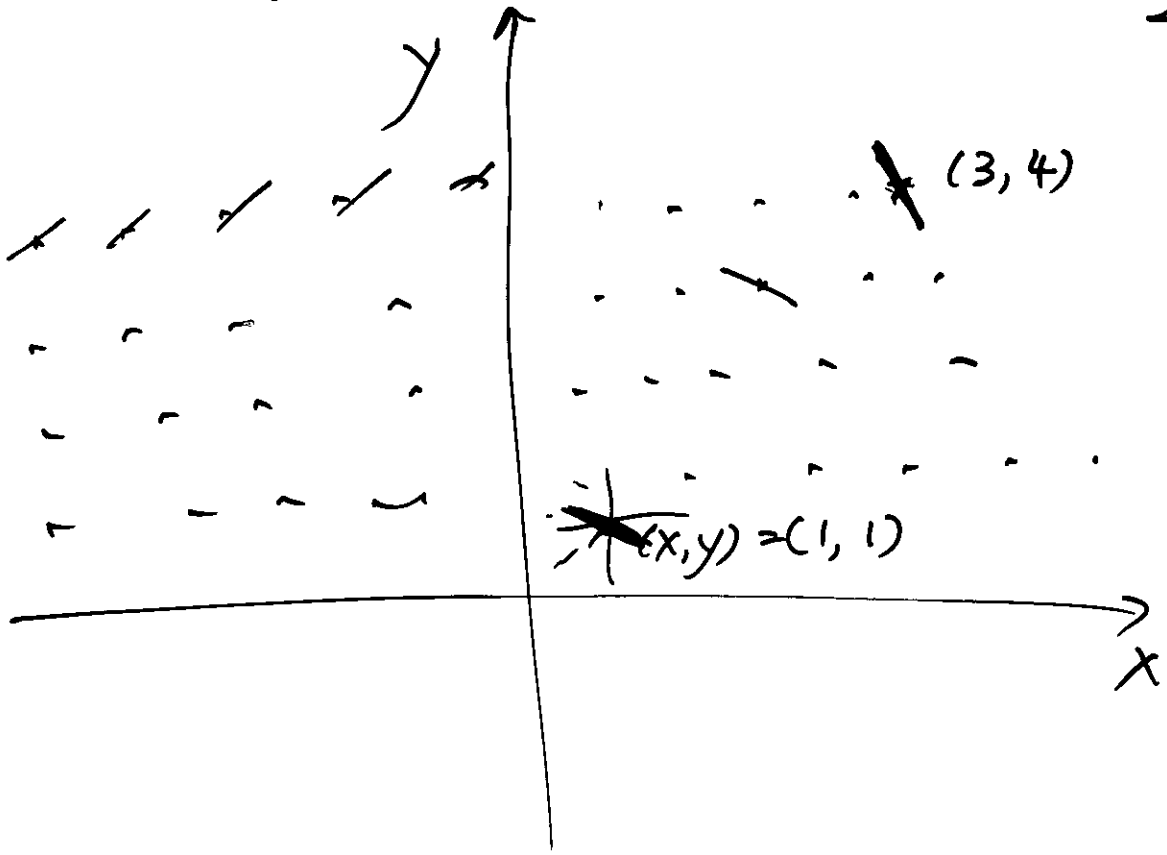


$$\frac{dy}{dx} = -\frac{x}{2}$$

$$-\frac{3}{2}$$



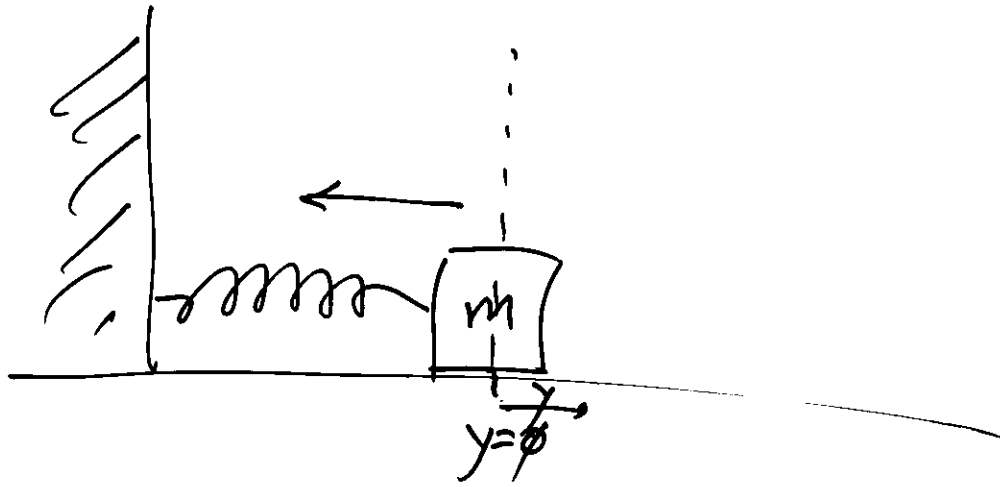
$$\underline{\underline{y''' = 2 + x}} \quad \int \frac{dx}{x^3} = \frac{y^2}{2x^2}$$

$$\int (2 + x) dx = \frac{y^2}{2x^2} \Rightarrow 2x + \frac{x^2}{2} = \frac{y^2}{2x^2}$$

$$\int (2x + \frac{x^2}{2}) dx = \frac{y^2}{2x^2} \Rightarrow \frac{y^2}{2x^2} = \frac{y^2}{2x^2}$$

$$\int (2x + \frac{x^2}{2} + C_1) dx = \frac{y^2}{2x^2} \Rightarrow \frac{y^2}{2x^2} = \frac{y^2}{2x^2}$$

$$\underline{\underline{y^2 = 2x^3 + \frac{1}{2}x^4 + C_2}}$$



$$\frac{dy}{dt}$$

$$\text{acc.} = \frac{d^2y}{dt^2} = y''$$

$$F = m \cdot (\text{acc})$$

$$F = -ky$$

$$k > 0$$

$$-ky = my''$$

$$y = \underline{\hspace{2cm}}$$

$$f(x, y) = \frac{x}{2}$$

$$\frac{dy}{dx} = \frac{x}{2}$$

