

$$2b) \frac{dy}{dx} = -\frac{1}{2y}$$

$$2y dy = -dx$$

$$\int 2y dy = \int -1 dx$$

$$\begin{array}{ccc} \text{"} & & \text{"} \\ y^2 + C_1 & & -x + C_2 \end{array}$$

$$\begin{aligned} y^2 &= -x + C_2 - C_1 \\ &= -x + C_3 \end{aligned}$$

$$y = \pm \sqrt{-x + C_3}$$