Quiz

On each slope field, sketch any three particular solutions and find the corresponding

(a) differential equation

$\frac{\delta y}{\delta x} = xy$

$\frac{\delta y}{\delta x} = -\frac{y}{x}$

$\frac{\delta y}{\delta x} = -\frac{x}{y}$

$\frac{\delta y}{\delta x} = \frac{x}{y}$

$\frac{\delta y}{\delta x} = x + y$

$\frac{\delta y}{\delta x} = \frac{y}{x}$

(b) general solution

$y = ke^x - x - 1$

$y = ke^{\frac{x^2}{2}}$

$y = kx$

$y^2 - x^2 = k$

$y = \frac{k}{x}$

$y^2 + x^2 = k$