Here’s a direction field for the differential equation $y' = \frac{y + 1}{x^2 + 1}$. Draw in the solution curves that pass through the points $(-2, 0), (1, 1)$ and $(0, -2)$. 
The graphics below show four direction fields. Decide which of the four equations given is associated with each field. You should be able to give a reason why you know you have identified each correctly. On each direction field, draw the solutions that pass through (1,0), (0,-1) and (-1,0).

(a) \( \frac{dy}{dx} = y - x \)  
(b) \( \frac{dy}{dx} = y^2 - x^2 \)  
(c) \( \frac{dy}{dx} = \frac{-x}{y} \)  
(d) \( \frac{dy}{dx} = 1 + \frac{x}{y} \)