Q1) Determine if the following differential equation has constant solution(s) and give these solutions.

(a) \( \frac{dy}{dx} = 2y^2 + 7y + 6 \).

(b) \( (y - 3)y' = 4 \)

Q2) Determine region of \( xy \) - plane for which \( \frac{dy}{dx} = \sqrt{xy} \) has a unique solution passing through \( (x_o, y_o) \) in the region.