Worksheet 2/12/2025

Solve the following differential equations.

1. $y' = \frac{2xy}{x^2+1}$

2. $xyy' = x^2 + 1$

3. $y' = e^{x+y}$

4. Problem 1 with an initial condition $y(0) = 2$.

5. $y' = \frac{x^2+1}{y^2+1}$