Exploring Slope Fields

Match the following differential equations with their slope fields below and on the next page, then draw a few solutions for each differential equation onto its slope field:

1. $y' = \frac{y}{x}$.
2. $y' = x$.
3. $y' = \frac{y - 2}{x - 1}$.
4. $y' = xy^2 + x^2$.
5. $y' = y - x$.
6. $y' = y$.
7. $y' = 2$.
8. $y' = -\frac{x}{y}$.

Plot A

Plot B

Plot C

Plot D