

Find the general and special solutions of the differential equation:

1. $y \cdot y' = 1$ $y(0) = 1$.

2. $y' = \frac{y}{x}$ $y(1) = 3$.

3. $y' = x \cdot y$ $y(0) = 2$.

4. $y' = \frac{x}{y}$ $y(0) = 4$.

5. $y' \frac{1}{y} = 1$ $y(0) = 1$.

6. $y' = y^2$ $y(0) = -1$.

WolframAlpha

general solution

$y \cdot dy/dx=1$

special solution

$y \cdot dy/dx=1, y(0)=1$