

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Separable Initial-Value Problems

Separate variables, retain every equilibrium solution, apply the initial condition, and state the maximal interval containing the initial point.

1. Solve $y' = 2y$, $y(2) = -2$. Include equilibrium solutions and the maximal interval.

2. Solve $y' = 1(y-0)^2$, $y(0) = 1$. Include equilibrium solutions and the maximal interval.

Name _____ Score _____ Teacher _____ Date _____

Separable Initial-Value Problems

Separate variables, retain every equilibrium solution, apply the initial condition, and state the maximal interval containing the initial point.

3. Solve $y' = -3(y-2)^2$, $y(2) = 2$. Include equilibrium solutions and the maximal interval.

4. Solve $y' = -2y$, $y(0) = 0$. Include equilibrium solutions and the maximal interval.
