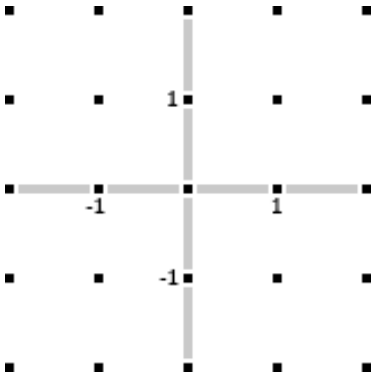
Calculus

Quiz

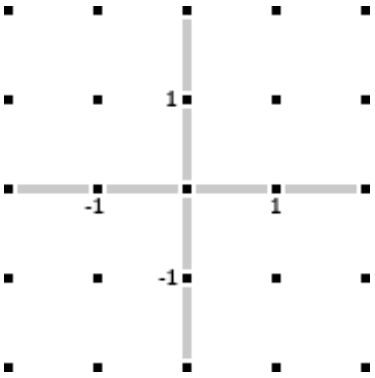
Your Name:

Sketch the field for the given differential equation, drawing a hash mark for each point on the graph.

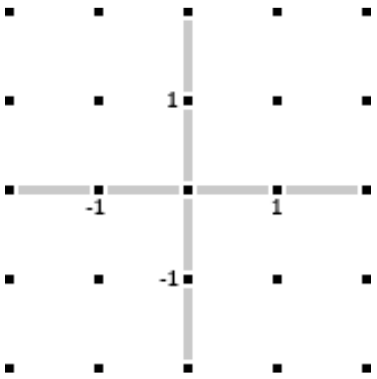
1. $y' = 1$



2. $y' = y$

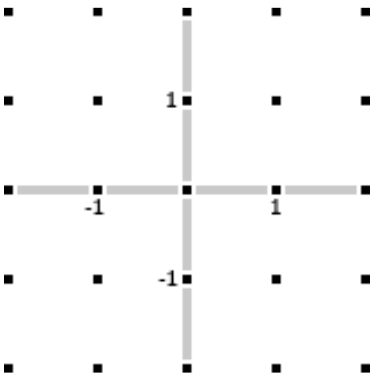


3. $y' = x - 2y$



Sketch the solution to #3 that goes through the point $(-2,1)$

4. $y' = xy + x$



Sketch the solution to #4 that goes through the point $(0,-1)$

5. Show that $y = \frac{\ln x}{x}$ is a solution of the differential equation $x^2y' + xy = 1$.