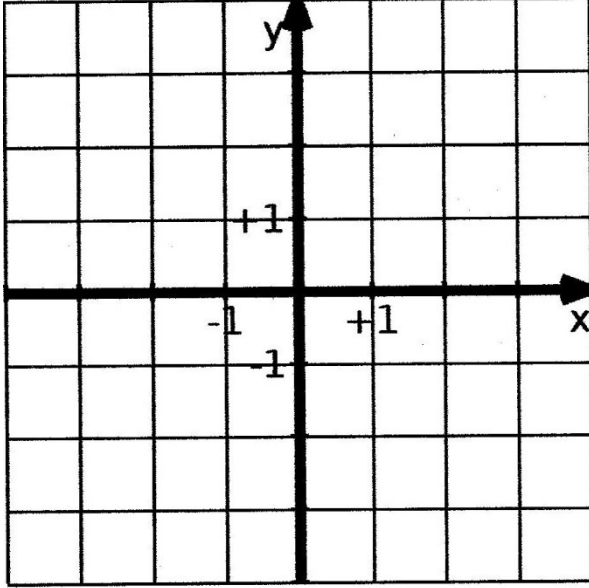


Solving Differential Equations and Sketching Slope Fields/Direction Fields

Differential Equation	Solve the Separable Differential Equation																																																																		
$\frac{dy}{dx} = \frac{x^2}{y^2}$																																																																			
Table	Graph																																																																		
<p data-bbox="94 743 683 806">Complete the table of values for $-3 \leq x \leq 3$ and $-3 \leq y \leq 3$</p> <table border="1" data-bbox="224 842 570 1682"> <thead> <tr> <th>x</th> <th>y</th> <th>dy/dx</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	x	y	dy/dx																																																																<p data-bbox="727 743 1476 806">Graph the Slope Field/Direction Field for the values in the table.</p>  <p data-bbox="727 1514 1503 1614">Use your graphing calculator to graph the slope field and the specific equation that satisfies the initial condition that when $x = 0$, $y = 2$.</p> <p data-bbox="727 1656 1068 1688">Sketch the equation above.</p> <p data-bbox="727 1768 1446 1831">NOTE: The solution to a differential equation must be a continuous function.</p>
x	y	dy/dx																																																																	