

First-Order Equations and Slope Fields

The first type of equation we will be focusing on is first-order equations. With only one derivative involved, these *should* be the easiest ones to solve.

Slope Fields

How can we visualize such a differential equation?

Example. Consider the slope field pictured below. What does the solution look like with $y(0) = 3$? What about with $y(1) = -1$?

