

Section 1.3

Solution Curve

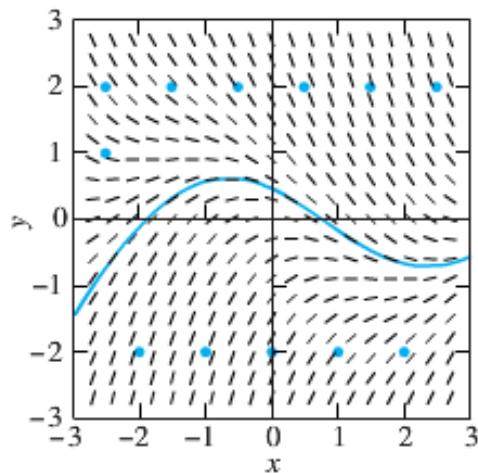
Slope fields

A general equation for an object thrown straight down

Logistic differential equation

Existence and uniqueness of solutions

$$\frac{dy}{dx} = -y - \sin x$$



$$\frac{dy}{dx} = 2x^2 y^2, \quad y(1) = -1$$

$$\frac{dy}{dx} = \sqrt[3]{y}, \quad y(0) = 0$$

$$\frac{dy}{dx} = \sqrt{x-y}, \quad y(2) = 2$$

x / y	-5	-4	-3	-2	-1	0	1	2	3	4	5
-5											
-4											
-3											
-2											
-1											
0											
1											
2											
3											
4											
5											

