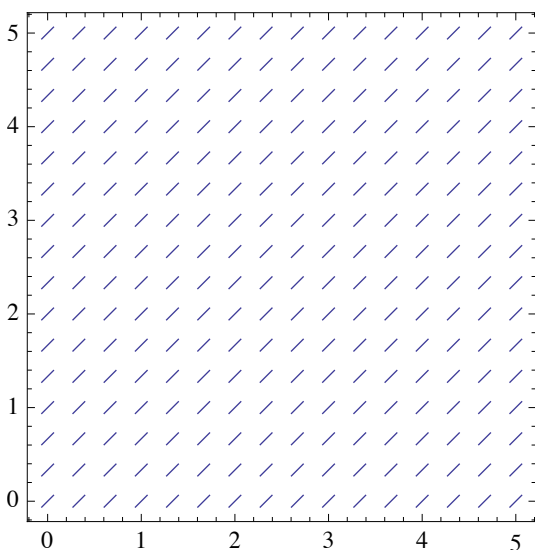


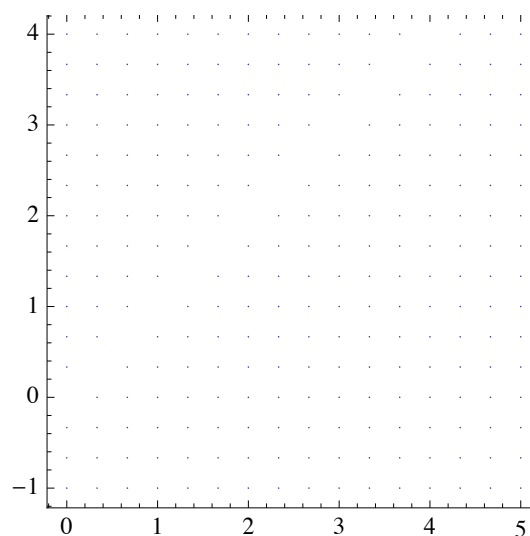
Lecture Handout, Feb 4: Slope Fields

Constant Slope



$$y' = 1$$

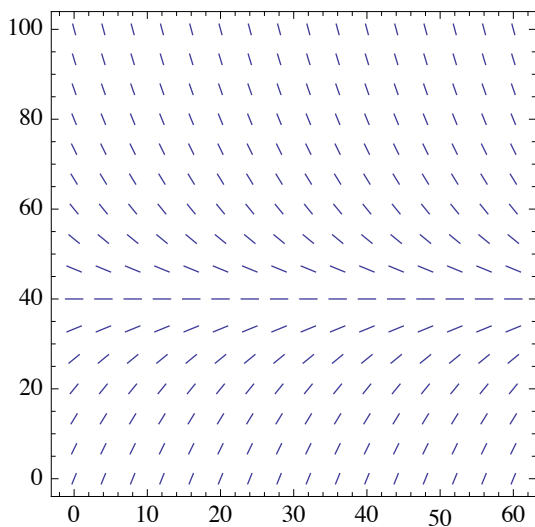
Linear DE



$$y' = y - x$$

$$y = x + 1 + Ce^x$$

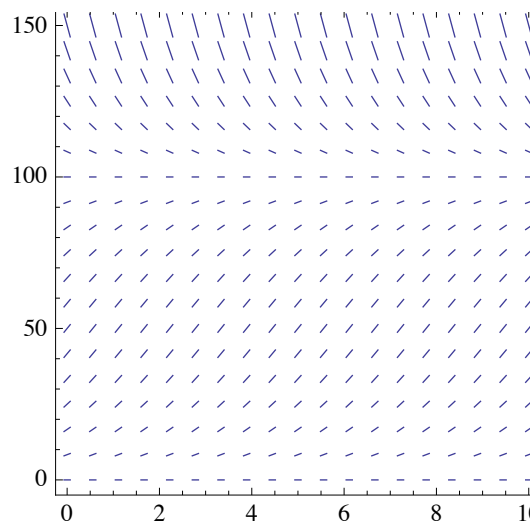
Newton's Law of Cooling



$$T' = -k(T - A)$$

$$k = 0.1, A = 40$$

Logistic Growth



$$P' = kP(M - P)$$

$$k = 0.0075, M = 100$$