

2. [14 points] Solve each of the following to find explicit real-valued solutions for y . (Note that minimal partial credit will be given on this problem.)

a. [7 points] $y' = x/(y(1 + x^2))$, $y(0) = 1$.

$y =$ _____

b. [7 points] $y'' + 14y' + 13y = 0$, $y(0) = 2$, $y'(0) = -2$.

$y =$ _____