

Math 307 Quiz 2

January 24, 2016

Problem 1. Check if each of the following equations is exact. If it is, solve it.

(a)

$$(x + 2y) + (2x - 3 \sin(y))y' = 0.$$

(b)

$$x^2 + 2xy = (x^2 + 3y)y'.$$

Problem 2. Find two different solutions to the initial value problem

$$y' = y^{1/3}, \quad y(1) = 0.$$