Name: July 6, 2016 MAP 2302.4787 Cyr

Quiz 2 You must show all work to receive full credit!!

Problem 1. (3 points) Find an explicit general solution to the differential equation

$$x\frac{dy}{dx} + 2y = x^{-3}.$$

**Problem 2.** (2 points) Show that the following equation is exact, and then find an implicit solution:

$$(ye^{xy} - y^{-1})dx + (xe^{xy} + xy^{-2})dy = 0.$$