

Math 202-172 Quiz 2.

Name_____ Section__ Serial #__Id_____

Q1: Given that $y_1 = x \sin(\ln x)$ is a solution of

$$x^2 y'' - xy' + 2y = 0$$

find a solution y_2 linearly independent of y_1

Q2: Show that if $f(x) = x, g(x) = |x|$ then the Wronskian of f, g is 0 at all nonzero numbers, but f, g are linearly independent .