KFUPM/ Department of Mathematics & Statistics MATH 202-06/ Quiz 3/ 123

ID # Name

1. [5pts] Classify as regular or irregular each singular point of the DE

$$x^{3} (x-1)^{2} (x^{2}-4)y'' + 4x (x-1) y' - (x+2) y = 0$$

2. [5pts] Find the indicial equation and the indicial roots of the DE

$$2xy'' - (3+2x)y' + y = 0$$

(x = 0 is a regular singular point for this DE)