Quiz No: 2, Math 202: Section _____ ID_____ Name_____

1. Use separation of variables method to solve the IVP $x^2 \frac{dy}{dx} = y(1-x), \quad y(-1) = -1$

Q2. Find general solution of the linear differential equations $x\frac{dy}{dx} + (1+x)y = e^{-x}\cos 2x$

Q3. Check if the differential equations $(2y^2 + 3x)dx + 2xydy = 0$ is exact? If not, find an appropriate integrating factor that makes the above equation an exact differential equations