

MA530. Quiz 3

1. Solve the initial value problem

$$(\#11 \text{ p.20}) \quad xy^2y' = y + 1; \quad y(3e^2) = 2$$

2. $ydx - (x + x^2 + y^2)dy = 0$

Hint: an integrating factor $\mu(x, y)$ is a function of $x^2 + y^2$: $\mu(x, y) = f(x^2 + y^2)$