## MA 262 - Quiz 2 (Lessons 3-5)

1. Find the general solution to the equation

$$
\frac{\mathrm{d} y}{\mathrm{~d} x}=\frac{y}{x}+2 x^{2} .
$$

2. Determine whether the equation

$$
\left(10 x y^{3}-3 y e^{x y}\right) \mathrm{d} x+\left(15 x^{2} y^{2}-3 x e^{x y}\right) \mathrm{d} y=0
$$

is exact, and if it is, solve it.

