Sections: 2.2,2.3 16 May 2018

1. 5 Find an implicit general solution to

$$\frac{dy}{dx} = \frac{2xe^y}{y}.$$

2. 4 Find a general solution to

$$x' = 2x + 5e^t.$$

3. 1 On what interval does

$$y' - \frac{y}{3+t} = e^{t^{2018}}, \quad y(0) = 5$$

have a unique solution?