MAP 2302 WRITTEN HOMEWORK #2
Due Monday September 9th, in Canvas

Question 1. Find the general solution of the differential equation.

$$\frac{dy}{dx} = \frac{y}{x} + 17x + 83$$

Question 2. Consider the following differential equation.

$$\frac{dy}{dx} + x^5 y = 0$$

(i) Is it separable?

(ii) Is it linear?

(iii) Find the general solution using any correct method.