

NAME:

**Problem 1 (10 points):** This is problem 7 from Section 10.2.  
Find the general solution for the differential equation

$$2\frac{dy}{dx} - 2xy - x = 0$$

**\*\*Please put away your homework before solving this problem.\*\***

**Problem 2 (10 points):** Use Euler's method to approximate the indicated function value, using  $h = 0.1$ .

$$\frac{dy}{dx} = 1 + y \quad y(0) = 2.$$

Find  $y(0.2)$ .