## Quiz \#5

Directions: Carefully read each question below and answer to the best of your ability in the space provided. Your answer to problems should be written in a clear and concise manner.
You MUST show your work to receive full credit!

1. (10 points) Consider the following differential equation

$$
-2 y y^{\prime}=2 x+y
$$

and points:

$$
\text { 1) }(0,1), \quad 2)(2,2), \quad 3)(-3,3) \text {. }
$$

Find the value of the derivative and draw the corresponding direction vector for each of the above points.

1) $\frac{d y}{d x}(0,1)=$ $\qquad$ 2) $\frac{d y}{d x}(2,2)=$ $\qquad$ 3) $\frac{d y}{d x}(-3,3)=$ $\qquad$ .
$y$

|  |  |  |  |  | $\uparrow$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Name:
Section (circle one): 001002

| Question: | 1 | Total |
| :--- | :---: | :---: |
| Points: | 10 | 10 |
| Score: |  |  |

