

## Quiz #4

**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. (5 points) Solve the following differential equation

$$(x + 3)\frac{dy}{dx} - y^2 = 0.$$

2. (5 points) Find the particular solution of the differential equation

$$\frac{dy}{dx} + 5x = 8$$

satisfying the initial condition  $y(0) = 5$ .

Name: \_\_\_\_\_

Section (circle one):            001            002

Question:	1	2	Total
Points:	5	5	10
Score:			