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

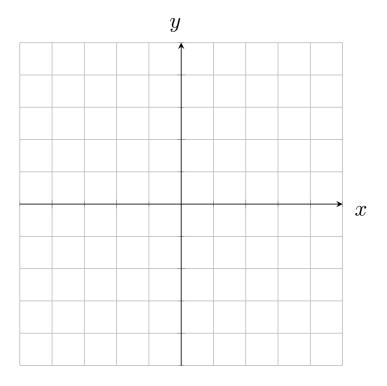
$$-2yy' = 2x + y$$

and points:

1)
$$(0,1)$$
, 2) $(2,2)$, 3) $(-3,3)$.

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

1)
$$\frac{dy}{dx}(0,1) = \underline{\hspace{1cm}}$$
, 2) $\frac{dy}{dx}(2,2) = \underline{\hspace{1cm}}$, 3) $\frac{dy}{dx}(-3,3) = \underline{\hspace{1cm}}$.



Name:			
Section (circle one):	001	002	

Question:	1	Total
Points:	10	10
Score:		

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