**Directions:** Carefully read each question below and answer to the best of your ability in the space provided. You **MUST** show your work to receive full credit!

1. (5 points) Find  $\frac{dy}{dx}$  of  $xy^2 + 2y + 3x = 4$ .

2. (5 points) Two trains leave a station at 1:00 PM. One travels north at 65 mph and the other travels east at 45 mph. How fast is the distance between the two trains changing at 4:00 PM? (Hint: Draw a picture)

Name: _				
Section (	(circle one)	:	003	004

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

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