Quiz

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) A train passes by a house at 48 miles per hour. Supposing the train has constant velocity and the shortest distance from the house to the tracks is 5 miles, how fast is the distance between the train and the house changing after 15 minutes?

2. (5 points) Let $f(x) = 2x^3 + 3x^2 - 72x + 6$. Find the critical numbers, if any, and use them to find the maximum and minimum values of $f(x)$ on the interval [-5,5].

Name: _____

Section (circle one):   021   022   023   024

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