## **Quiz 1** Calculus 1 6/9/2005

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. The manager of a furniture factory finds that it costs \$2200 to manufacture 100 chairs in one day and \$4800 to produce 300 chairs in one day. Express the cost as a function of the number of chairs produced, assuming that it is linear.

2. The monthly cost of driving a car depends on the number of miles driven. Lynn finds that in May it cost her \$380 to drive 480 miles and in June it cost her \$460 to drive 800 miles. Assuming that the relationship is linear, predict the cost of a month in which she drives 600 miles.<sup>1</sup>

 $<sup>^{1}\</sup>mbox{Both}$  problems borrowed from Stewart 5th, p. 36.