Name: $\qquad$
Section: $\qquad$

## MATH 120D

QUIZ 3
October 17, 2002

You may use a calculator to complete this quiz. No notes please. Show all work.

1. (6 points) Chris and Terry are standing together on a street corner. At noon, they say their good-byes. Chris walks east at a rate of 3.5 miles per hour. Terry begins walking north at a rate of 4 miles per hour. After 1 hour, Terry turns and walks west, maintaining a rate of 4 miles per hour. Find a multi-part function $d(t)$ that gives the distance between Chris and Terry $t$ hours after noon. (You do not need to simplify your function.)
2. (4 points) Find the vertex and axis of symmetry of $f(x)=3 x^{2}-12 x+11$.
