

Name: _____

Math 120 Quiz #3
January 29, 2007

Show all work and when rounding your answers, round to 4 digits after the decimal.

1. (3 pts.) Two straight roads diverge at an angle of 50° . Two cars leave the intersection at the same moment. One car travels at 40 mph and the other at 60 mph. How far apart are the cars after 45 minutes?

2. (4 pts.) Find the terminal point $P(x, y)$ on the unit circle determined by $t = \frac{11\pi}{6}$. (Give **exact** values of x and y .)

3. (3 pts.) Find the **exact** values of the trigonometric functions of t given that $\tan t = -\frac{5}{3}$ with the terminal point of t in quadrant II.