

Name: _____

Math 120 Quiz #2
January 23, 2007

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

1. (a) (2 pts.) Find the reference angle for $\theta = \frac{10\pi}{3}$.

(b) (2 pts.) Find the **exact** value of $\csc \frac{10\pi}{3}$.

2. (3 pts.) For a triangle with the given conditions, find all possible values **for the angle B** given that $\angle A = 70^\circ$, $b = 100$, and $a = 96$. **Do not solve the triangle.**

3. (3 pts.) Two drivers that are 4 miles apart are looking at an airplane that is flying over a straight highway. The angles of elevation are 15° and 30° as shown in the figure. What is the elevation of the plane? (Hint: How far is either driver 1 or 2 away from the plane?)

