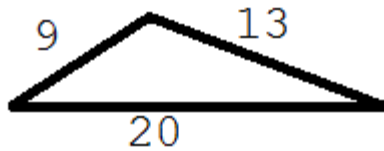


Test #1

Trigonometry

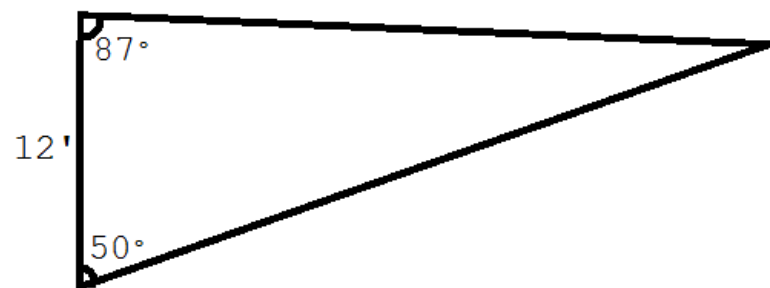
Friday, March 14th, 2014

1. Find the exact value of each of the following.
 - (a) $\sin 45^\circ$
 - (b) $\tan -150^\circ$
 - (c) $\sec 180^\circ$
 - (d) $\csc 210^\circ$
 - (e) $\cot -45^\circ$
2. Find the area of the triangle. Round to the nearest unit.



3. If $\sin \theta = \frac{5}{13}$ and $\tan \theta = \frac{-5}{12}$, find $\sec \theta$.

4. Solve the triangle. Label the sides and angles that are not given. Round to the nearest unit.



5. In a rhombus whose side measures 22 and smaller angle measures 55° , find the length of the larger diagonal, to the *nearest tenth*.

6. As shown in the diagram below, fire-tracking station A is 100 miles due west of fire-tracking station B. A forest fire is spotted at F, on a bearing 47° northeast of station A and 15° northeast of station B. Determine, to the nearest tenth of a mile, the distance the fire is from both station A and station B. [N represents due north.]

