

LSC Practice #1

Name _____ Per. _____

Given $\triangle ABC$: Solve the following triangles. Find all solutions. **Round sides to nearest tenths and angles to nearest minute.**

1. $\angle C = 23^\circ 15'$; $b = 21.2$; $c = 15.4$

2. $a = 14$; $b = 9$; $c = 16$

3. $\angle A = 20^\circ 11'$; $\angle B = 68^\circ 36'$; $c = 20$

4. $\angle C = 48^\circ 51'$; $a = 15$; $b = 17$

5. In order to know how much seed to buy for a triangular plot of land, Kevin needs to know the area of the plot. He knows two of the sides are 25 feet and 30 feet and the angle between these two sides is $47^\circ 25'$. Find the area using two different methods.

Method 1:

Method 2:

6. Given $\triangle ABC$ with $\angle C = 45^\circ$ and $a = 32$, find the values of c in which there will be:

a) No triangles: _____

b) One triangle: _____

c) Two triangles: _____