LSC Practice #3   Name_____Per._____

Given $\triangle ABC$: Solve the following triangles. Find all solutions. **Round sides to nearest tenth and angles to nearest minute. If it's not a triangle, explain why not.**

1. $\angle C = 20°13'$; $b = 14$; $c = 4$

2. $\angle A = 28°15'$; $\angle B = 121°18'$; $c = 22.3$

3. $\angle A = 40°25'$; $a = 17$; $b = 20$

4. $\angle A = 42°$; $c = 12$; $b = 16$

5. $a = 12$; $b = 15$; $c = 30$

6. Two adjacent sides of a parallelogram are 130 feet and 200 feet. The angle between these two sides is 75 degrees. Find the length of the shortest diagonal of the parallelogram and the area of the parallelogram.

7. $b = 12.3;\ a = 16.2;\ c = 6$

8. Find the possible values of b that would produce the indicated number of triangles given that $B = 52°$, $c = 13.3$.
   No triangles:
   One Triangle:
   Two Triangles:

9. Find the area of a triangle with sides of 12 cm, 14 cm, 20 cm.

10. Find the area of a triangle if $\angle B = 120°15'$;￼ $a = 80$;￼ $c = 110$