

LSC Practice #2

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. $\angle C = 28^\circ$; $b = 14$; $c = 16$

2. $\angle A = 36^\circ 20'$; $\angle C = 81^\circ 15'$; $c = 42.5$

3. $\angle C = 120^\circ 15'$; $a = 17$; $b = 20$

4. $\angle A = 42^\circ$; $a = 12$; $b = 16$

5. $a = 30$; $b = 42$; $c = 21$

6. The angle of elevation from a ship at point A to the top of a light house, point B, is 43° . When the ship reaches point C, 300 meters closer to the light house, the angle of elevation is 56° . Find, to the nearest tenth of a meter, the height of the light house.

7. $\angle C = 28^\circ 37'$; $a = 16.2$; $c = 6$

8. Find the area of a triangle with sides of 10 cm, 15 cm, 17 cm.

9. Find the area of a triangle if $\angle C = 60^\circ 15'$; $a = 17$; $b = 20$