

1. Solve the Triangle (with Calculator). Round angles to the nearest minute and sides to the nearest hundredth.

$$a = 11'' \quad b = 14'' \quad c = 21''$$

- Group 1: Find A with law of cosines then B with law of sines and then C.
- Group 2: Find A with law of cosines then C with law of cosines and then B.
- Group 3: Find B with law of cosines then C with law of sines and then A.
- Group 4: Find C with law of cosines then A with law of sines and then B.
- Group 5: Find A and B using law of cosines and then get C.
- Group 6: Use law of cosines all the way through in any order to get all three angles.
- Group 7: Find A with law of cosines then C with law of sines and then B.
- Group 8: Find C with law of cosines then B with law of sines and then A.

2. Listed below are the three sides of a triangle and the type of triangle it is if classified by angle size. Find $a^2 + b^2$ and compare it to c^2 , where a and b are the two smallest sides and c is the largest side. What do you notice?

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|-----------------------|---------------------------|
| a. 3, 4, 5, right | b. 15, 10.9, 15.41, acute |
| c. 11, 14, 21, obtuse | d. 5, 12, 13, right |
| e. 7, 13, 8, obtuse | f. 5, 5, 5, acute |