

**Rounding: Sides to the nearest tenth and angles to the nearest degree.**

**Determine the number of Triangles**

1.)  $A = 45^\circ$   $b = 6$   $C = 25^\circ$  \_\_\_\_\_

2.)  $A = 30^\circ$   $b = 20$   $a = 15$  \_\_\_\_\_

3.)  $a = 7$   $b = 6$   $A = 75^\circ$  \_\_\_\_\_

4.)  $a = 9$   $b = 11$   $A = 25^\circ$  \_\_\_\_\_

5.)  $a = 10$   $b = 15$   $A = 76^\circ$  \_\_\_\_\_

**Use Law of Sines.**

6.) Find C.  $B = 70^\circ$ ,  $b = 15$ ,  $c = 10$

7.) Find c.  $B = 10^\circ$ ,  $b = 16$ ,  $C = 70^\circ$

**Use Law of Cosines.**

8.) Find A.  $a = 25$ ,  $b = 40$ ,  $c = 20$

9.) Find c.  $C = 55^\circ$   $b = 12$   $a = 16$

**Solve each triangle:** Draw a sketch, set up equation(s) used, and find all missing parts. Round all answers to the nearest tenth. Work neatly. If I cannot follow the work the problem is wrong.

10.)  $C = 70^\circ$ ,  $b = 8$ ,  $a = 9$

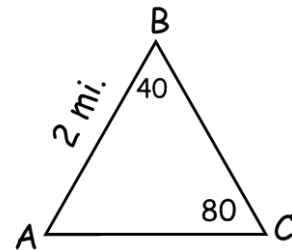
11.)  $A = 100^\circ$ ,  $C = 30^\circ$ ,  $a = 20$

12.)  $a = 8$ ,  $b = 10$ ,  $c = 12$

**Solve for BOTH triangles.**

13.)  $A = 35$ ,  $a = 7$ ,  $b = 9$

14.) Abby, Brittani, and Carly are three friends. The locations of their houses form a triangle. Abby lives 2 miles from Brittani. Use the triangle below to find how far Abby and Carly live apart.



**Find the area of each triangle: Round to nearest tenth.**

15.)  $C = 102^\circ$ ,  $b = 52$ ,  $a = 90$

16.)  $a = 9$ ,  $b = 6$ ,  $c = 13$