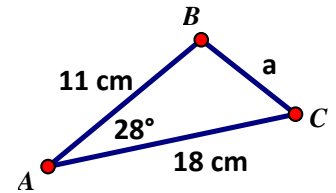
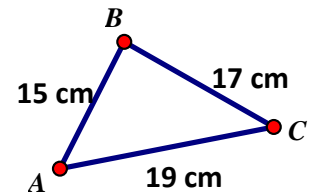


1. Solve the triangle by determining all of its sides and angles.



$m\angle A = 28^\circ$ $m\angle B = \underline{\hspace{2cm}}$ $m\angle C = \underline{\hspace{2cm}}$ $a = \underline{\hspace{2cm}} \text{ cm}$ $b = 18 \text{ cm}$ $c = 11 \text{ cm}$
---

2. Solve the triangle by determining all of its sides and angles.



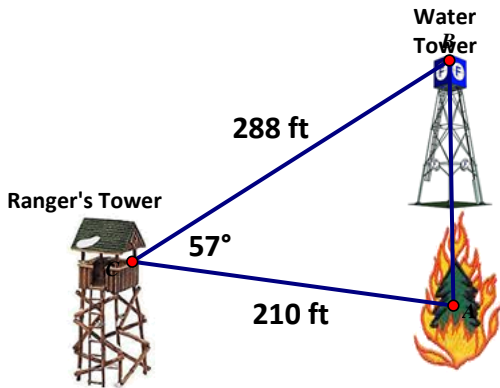
$m\angle A = \underline{\hspace{2cm}}$ $m\angle B = \underline{\hspace{2cm}}$ $m\angle C = \underline{\hspace{2cm}}$ $a = 17 \text{ cm}$ $b = 19 \text{ cm}$ $c = 15 \text{ cm}$
---

3. Given  $\triangle ABC$ , where  $m\angle B = 34^\circ$ ,  $a = 8 \text{ cm}$  and  $c = 12 \text{ cm}$ . Solve the triangle.

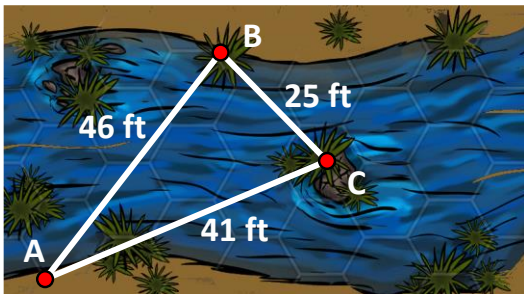
$m\angle A = \underline{\hspace{2cm}}$ $m\angle B = 34^\circ$ $m\angle C = \underline{\hspace{2cm}}$ $a = 8 \text{ cm}$ $b = \underline{\hspace{2cm}} \text{ cm}$ $c = 12 \text{ cm}$
--

4. Solve the following problems.

a) A forest ranger spots a tree that is on fire. He is able to determine that he is 210 ft from the fire and is 288 ft from the water tower. If the angle between the tower and the fire is  $57^\circ$ , how far is the water tower from the fire? (nearest foot)



b) A surveyor is able to gather some information about the terrain around a river. He plans to build a bridge to the island from reference point A and from reference point B. What is the angle formed at the island between those two reference points ( $\angle BCA$ )? (nearest degree)



c) A rock climber at Point A stops to analyze the terrain around the river. From his high vantage point he is able to determine that he is 125 ft from west shore (point B) and 200 ft from the east shore (point C) and the angle between those two locations is  $25^\circ$ . What is the width of the river? (nearest foot)

