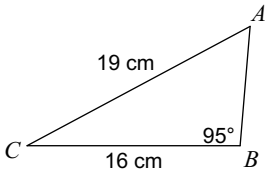
SM3-A HW#10-2 (law of sines ambiguous case)

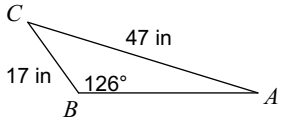
Date_____ Period____

Find each measurement indicated. Round your answers to the nearest tenth.

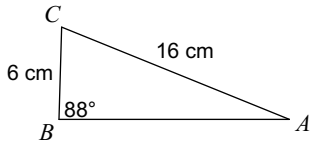
1) Find $m\angle A$



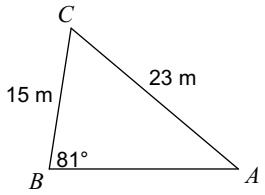
2) Find $m\angle A$



3) Find $m\angle A$



4) Find $m\angle A$



State the number of possible triangles that can be formed using the given measurements.

5) $m\angle C = 30°$, $b = 31$ cm, $c = 22$ cm

6) $m\angle B = 90°$, $a = 17$ yd, $b = 17$ yd

7) $m\angle C = 151°$, $c = 34$ yd, $b = 11$ yd

8) $m\angle A = 24°$, $c = 35$ cm, $a = 26$ cm

9) $m\angle C = 57°$, $b = 24$ km, $c = 7$ km

10) $m\angle B = 32°$, $a = 35$ m, $b = 34$ m

Find each measurement indicated. Round your answers to the nearest tenth. Hint: Draw the picture. If you have the ambiguous case, you must determine how many triangles are possble. For two triangles the angle will have two different measures.

11) $m\angle C = 74°$, $b = 30$ yd, $c = 15$ yd
Find $m\angle A$

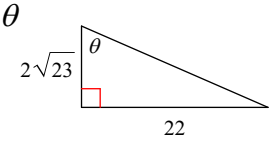
12) $m\angle C = 65°$, $b = 33$ yd, $c = 31$ yd
Find $m\angle A$

13) $m\angle C = 36°$, $b = 21$ mi, $c = 20$ mi
Find $m\angle B$

14) $m\angle A = 47°$, $c = 15$ mi, $a = 7$ mi
Find $m\angle C$

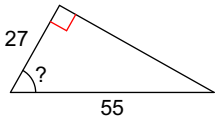
Find the value of the trig function indicated.

15) sec θ



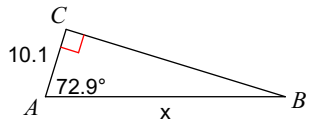
Find the measure of the indicated angle to the nearest degree.

16)



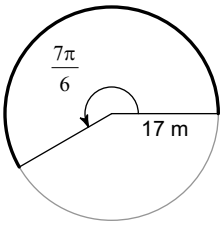
Find the measure of each side indicated. Round to the nearest tenth.

17)



Find the length of each arc.

18)



Find the area of each sector.

19)