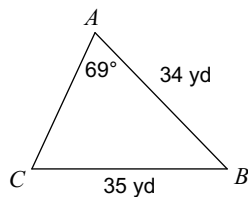
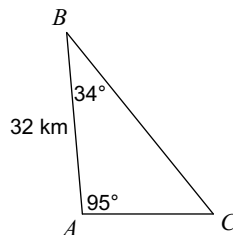


## SM3-A HW #10-4 (Law of Cosines)

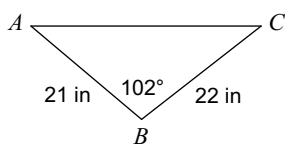
Date \_\_\_\_\_ Period \_\_\_\_\_

**Find each measurement indicated. Round your answers to the nearest tenth.**1) Find  $m\angle C$ 

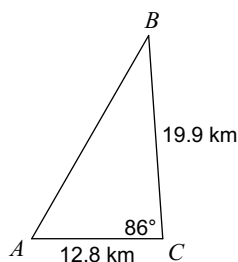
2) Find AC



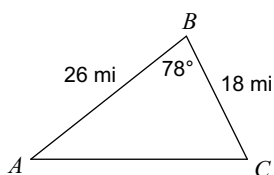
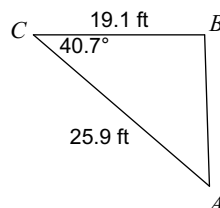
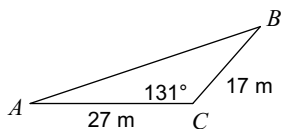
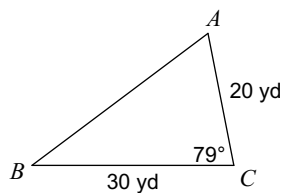
3) Find AC



4) Find AB



5) Find AC

6) Find  $m\angle A$ 7) Find  $m\angle A$ 8) Find  $m\angle A$ 

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

9)  $m\angle C = 60^\circ$ ,  $b = 20$  km,  $c = 12$  km

10)  $m\angle A = 131^\circ$ ,  $c = 8$  m,  $a = 25$  m

11)  $m\angle B = 32^\circ$ ,  $a = 25$  yd,  $b = 20$  yd

12)  $m\angle B = 29^\circ$ ,  $a = 27$  m,  $b = 24$  m

**Solve each equation. Round your answers to the nearest ten-thousandth.**

13)  $19^{n-1} + 1 = 24$

**Solve each equation.**

14)  $x^2 + 6x - 25 = 0$

**Solve each equation. Remember to check for extraneous solutions.**

15)  $\frac{1}{x} = \frac{x+6}{4x} - \frac{1}{4x}$