$$a^2 = b^2 + c^2 - 2bc\cos(A)$$

$$b^2 = a^2 + c^2 - 2ac\cos(B)$$

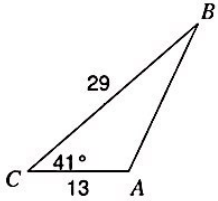$$c^2 = a^2 + b^2 - 2ab\cos(C)$$
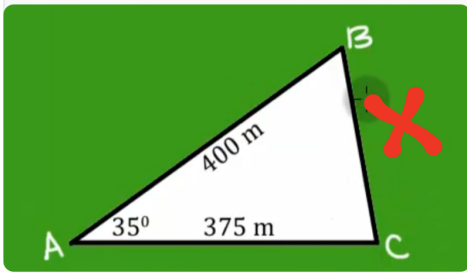
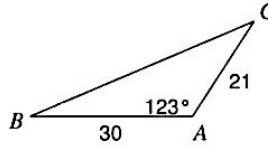400 m

35°   375 m

Kuta Software - Infinite Algebra 2   Name_____

The Law of Cosines   Date_____ Period_____

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

1) Find c.
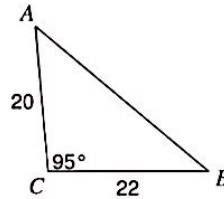
2) Find a

3) Find a
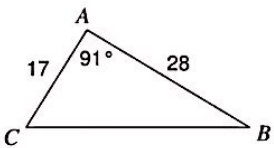
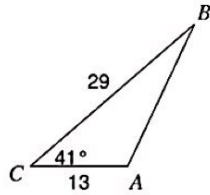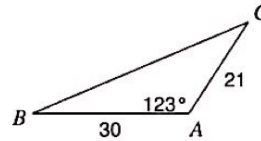4) Find a
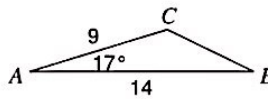
5) Find c
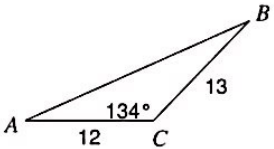
6) Find c

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

1) Find c.

B
29
41°
C   13   A
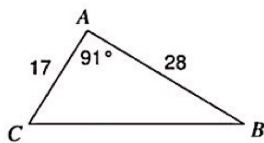
NORMAL FLOAT AUTO REAL DEGREE MP
$13^2+29^2-2*13*29*\cos(41°$
440.9489765
$\sqrt{Ans}$
20.99878512
$\sqrt{Ans}$
4.582443139

2) Find a

C
21
123°
B   30   A
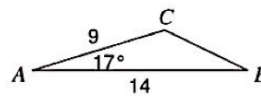
$30^2+21^2-2*30*21*\cos(123°$
2027.245184
$\sqrt{Ans}$
45.02493958

3) Find a
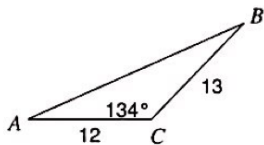
A
17   91°   28
C   B

$17^2+28^2-2*14*28*\cos(91°$
1086.682687
$\sqrt{Ans}$
32.96487049

4) Find a

C
9
17°
A   14   B

$9^2+14^2-2*9*14*\cos(17°$
36.0112015
$\sqrt{Ans}$
6.000933386

5) Find c

B
13
134°
A   12   C

$13^2+12^2-2*13*12*\cos(134°$
529.7334116
$\sqrt{Ans}$
23.01593821

6) Find c

A
20
95°
C   22   B
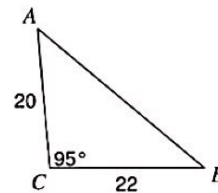
NORMAL FLOAT AUTO REAL DEGREE MP
$20^2+22^2-2*20*22*\cos(95°$
960.6970536
$\sqrt{Ans}$
30.99511338