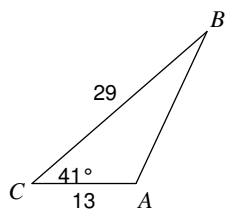


The Law of Cosines

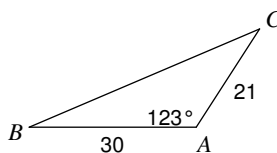
Date _____ Period ____

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

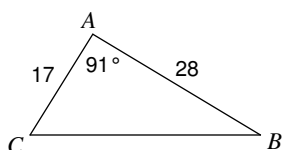
1) Find AB



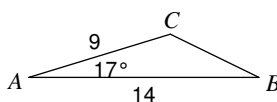
2) Find BC



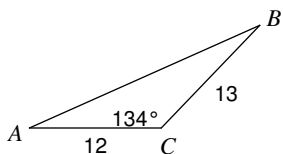
3) Find BC



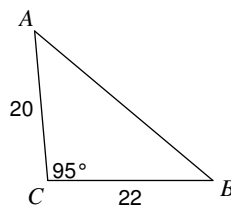
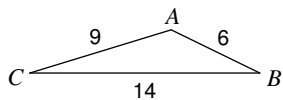
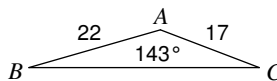
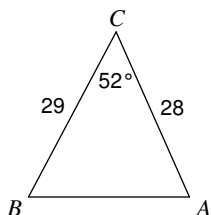
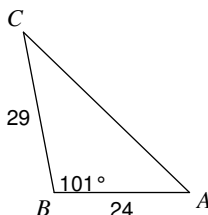
4) Find BC



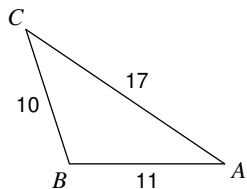
5) Find AB



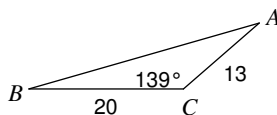
6) Find AB

7) Find $m\angle A$ 8) Find $m\angle B$ 9) Find $m\angle A$ 10) Find $m\angle C$ 

11) Find $m\angle A$

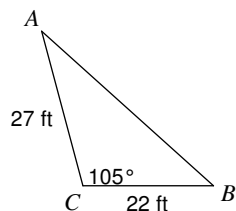


12) Find $m\angle A$

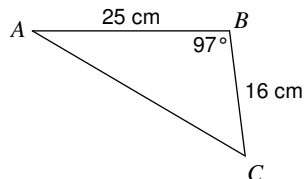


Solve each triangle. Round your answers to the nearest tenth.

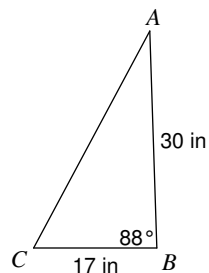
13)



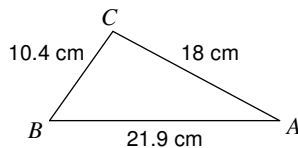
14)



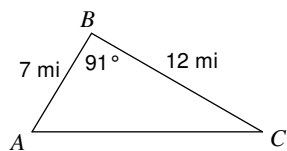
15)



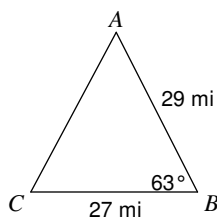
16)



17)



18)



19) In $\triangle ABC$, $a = 14$ cm, $b = 9$ cm, $c = 6$ cm

20) In $\triangle XYZ$, $m\angle X = 138^\circ$, $y = 15$ in, $z = 25$ in

21) In $\triangle QRP$, $q = 12$ in, $p = 28$ in, $r = 18$ in

22) In $\triangle QRP$, $p = 28$ km, $q = 17$ km, $r = 15$ km

23) In $\triangle DEF$, $e = 16$ yd, $d = 12$ yd, $f = 17$ yd

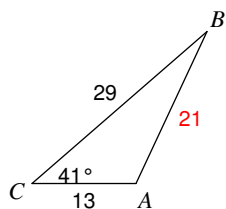
24) In $\triangle RPQ$, $p = 18$ mi, $m\angle R = 17^\circ$, $q = 28$ mi

The Law of Cosines

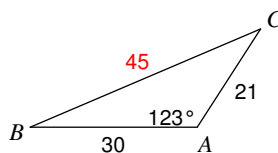
Date _____ Period _____

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

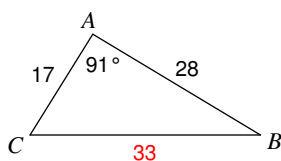
1) Find AB



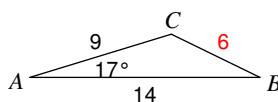
2) Find BC



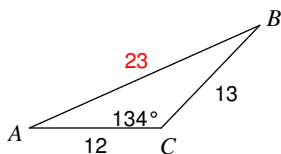
3) Find BC



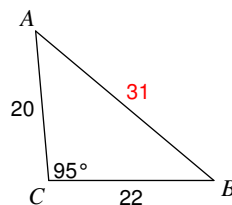
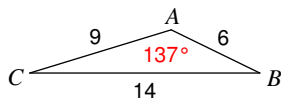
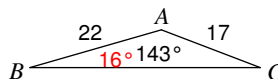
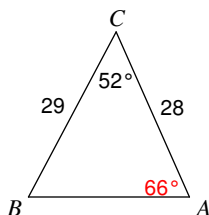
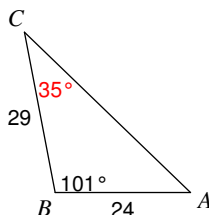
4) Find BC



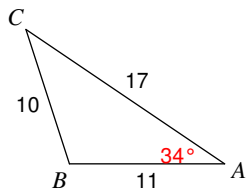
5) Find AB



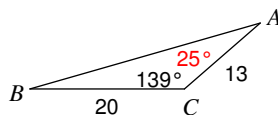
6) Find AB

7) Find $m\angle A$ 8) Find $m\angle B$ 9) Find $m\angle A$ 10) Find $m\angle C$ 

11) Find $m\angle A$

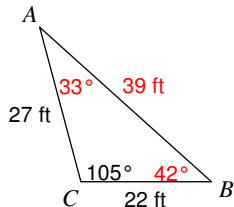


12) Find $m\angle A$

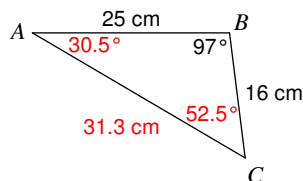


Solve each triangle. Round your answers to the nearest tenth.

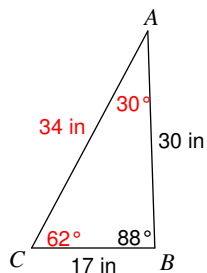
13)



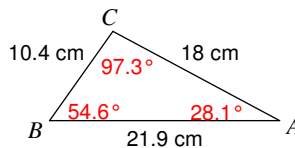
14)



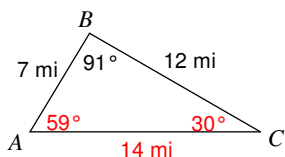
15)



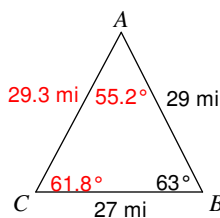
16)



17)



18)



19) In $\triangle ABC$, $a = 14$ cm, $b = 9$ cm, $c = 6$ cm

$$m\angle A = 137^\circ, m\angle B = 26^\circ, m\angle C = 17^\circ$$

20) In $\triangle XYZ$, $m\angle X = 138^\circ$, $y = 15$ in, $z = 25$ in

$$m\angle Y = 15.5^\circ, m\angle Z = 26.5^\circ, x = 37.5$$

21) In $\triangle QRP$, $q = 12$ in, $p = 28$ in, $r = 18$ in

$$m\angle Q = 17^\circ, m\angle R = 26^\circ, m\angle P = 137^\circ$$

22) In $\triangle QRP$, $p = 28$ km, $q = 17$ km, $r = 15$ km

$$m\angle Q = 31^\circ, m\angle R = 27^\circ, m\angle P = 122^\circ$$

23) In $\triangle DEF$, $e = 16$ yd, $d = 12$ yd, $f = 17$ yd

$$m\angle D = 42.5^\circ, m\angle E = 64.3^\circ, m\angle F = 73.2^\circ$$

24) In $\triangle RPQ$, $p = 18$ mi, $m\angle R = 17^\circ$, $q = 28$ mi

$$m\angle P = 26^\circ, m\angle Q = 137^\circ, r = 12$$