

Law of sines

Date _____ Period _____

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

1) $m\angle B = 36^\circ$, $a = 31$ mi, $b = 30$ mi

Two triangles

2) $m\angle B = 16^\circ$, $a = 28$ ft, $b = 17$ ft

Two triangles

3) $m\angle C = 36^\circ$, $b = 31$ ft, $c = 25$ ft

Two triangles

4) $m\angle B = 65^\circ$, $a = 27$ yd, $b = 34$ yd

One triangle

5) $m\angle C = 152^\circ$, $b = 35$ in, $c = 32$ in

None

6) $m\angle B = 41^\circ$, $a = 11$ in, $b = 21$ in

One triangle

7) $m\angle B = 135^\circ$, $a = 23$ in, $b = 50$ in

One triangle

8) $m\angle A = 86^\circ$, $c = 15$ km, $a = 30$ km

One triangle

9) $m\angle A = 30^\circ$, $c = 32$ in, $a = 29$ in

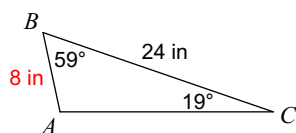
Two triangles

10) $m\angle A = 52^\circ$, $a = 15$ in, $c = 13$ in

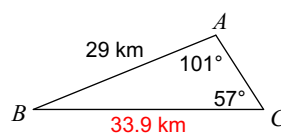
One triangle

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

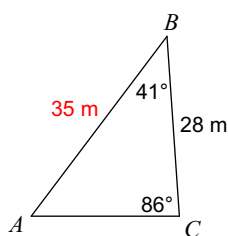
11) Find AB



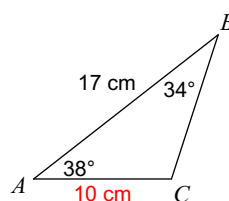
12) Find BC



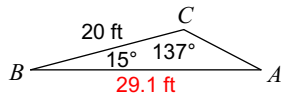
13) Find AB



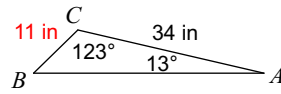
14) Find AC



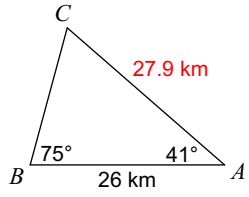
15) Find AB



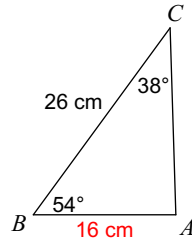
16) Find BC



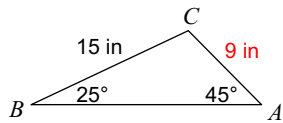
17) Find AC



18) Find AB



19) Find AC



20) Find BC

