

Law of Sines and Cosines
Practice

Question 1
 $\angle C = 105^\circ$, $\angle B = 40^\circ$, $c = 20$
Type of triangle? _____ law to use? _____

Question 2
 $\angle A = 58^\circ$, $a = 4.5$, $b = 12.8$
Type of triangle? _____ law to use? _____

Question 3

$$a = 8, b = 3, c = 9$$

Type of triangle? _____ law to use? _____

Question 4

$$\angle A = 58^\circ, a = 11.5, b = 12.8$$

Type of triangle? _____ law to use? _____

Question 5

$$\angle C = 105^\circ, a = 10, b = 4.5$$

Type of triangle? _____ law to use? _____

Question 6

Find the area of the triangle if $a = 8.3$, $b = 4.6$ and the measure of angle C is 103° .

Question 7

Let ABCD be a parallelogram. If $AB = 7$ and $BC = 9$ and $\angle B = 38^\circ$, find the length of the diagonal of the parallelogram.

Then find the area of the parallelogram.

Question 8

Find the area of the triangle if $a = 12$, $b = 15$ and $c = 10$.

Question 9

Find the area of the triangle if $a = 23$, $c = 8$
and the measure of angle B is 32° .

Question 10

$\angle A = 135^\circ$, $b = 4$, $c = 9$
Find the measure of angle C

Question 11

Find the area of the triangle if $a = 12$, $b = 12$
and $c = 12$.

Question 12

$\angle A = 60^\circ$, $a = 9$, $c = 10$

Find b .

Question 13

› From a certain distance, the angle of elevation to the top of a building is 17° . At a point 50m closer to the building, the angle of elevation is 31° . Approximate the height of the building to the nearest hundredth using the Law of Sines.
