

The Sine Rule

EQ: How do you use the Sine Rule to find the unknown sides and angles of any triangle?

What do we need to know in order to use the Sine Rule?

OR

What is the Sine Rule?

Example 1: 2 angles and a side

Solve triangle ABC if $a = 45$ cm, $A = 97^\circ$,
and $B = 24^\circ$.

Sine Rule

Example 2: 2 angles and a side

Solve triangle ABC if $b = 11$ in, $A = 72^\circ$,
and $B = 29^\circ$.

Example 1: 2 sides and a non-included angle

Solve triangle ABC if $b = 3$ cm, $c = 1.2$ cm,
and $B = 115^\circ$.

Alternative Form of Sine Rule

(useful when finding angles)

Example 2: 2 sides and a non-included angle

Solve triangle ABC if $b = 4$ in, $a = 6$ in, and
 $A = 72^\circ$.