# Sine rule

The *sine rule* states that if $a$, $b$ and $c$ are the lengths of the sides of a triangle, and $A$, $B$ and $C$ are the angles in the triangle; with $A$ opposite $a$, etc., then

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}.$$

This ratio is also equal to $2R$, where $R$ is the radius of the circumcircle of $ABC$. Some regard this further equality as part of the sine rule.

Another name sometimes used for the sine rule is *the law of sines*.