## Triangles

## A triangle has three sides and three angles. <br> The three angles always add up to 180 degrees.

## Equilateral, Isosceles and Scalene

There are three special names given to triangles that tell how many sides and angles are equal.
There can be 3, 2, or NO equal sides and angles:

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Equilateral Triangle
Three equal sides. a
Three equal angles, always $60^{\circ}$.

Isosceles Triangle
Two equal sides. a
Two equal angles. $\boldsymbol{\theta}$

Scalene Triangle
No equal sides.
No equal angles.

## Triangles

## What Type of Angle ?

Triangles can also have names that tell you what type of angle is inside:


Acute Triangle
All angles are less than $90^{\circ}$.


## Right Triangle

Has a right angle ( $90^{\circ}$ )


## Obtuse Triangle

 Has an angle greater than $90^{\circ}$.
## Combining the Names.

Sometimes a triangle may have two names, here is a list of possible combinations:

Right Scalene Triangle
Has a right angle ( $90^{\circ}$ ), and no equal sides or angles.

Obtuse Scalene Triangle
Has an angle $>90^{\circ}$, and no equal sides or angles.

Acute Scalene Triangle
Has all angles $<90^{\circ}$, and no equal sides or angles.

Right Isosceles Triangle Has a right angle ( $90^{\circ}$ ) and two equal angles ( $45^{\circ}$ ), and two equal sides.

Obtuse Isosceles Triangle Has an angle $>90^{\circ}$, and two equal sides.

Acute Isosceles Triangle
Has all angles $<90^{\circ}$, and two equal sides.

