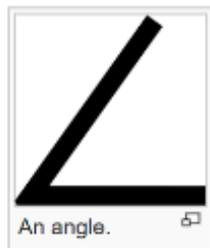




# ANGLES GRADUATE AWARD

## WHAT IS AN ANGLE?

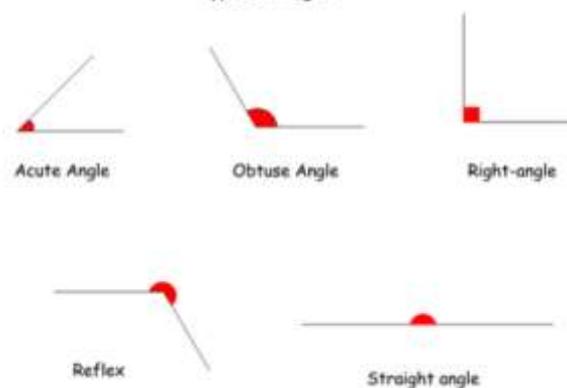


An angle is the space between two lines that meet each other. When two lines meet at a point, an angle is formed. The two lines are called the arms of the angle.

To measure the size of an angle, we use degree. Degree is a standard unit. Degree is denoted by the symbol  $^{\circ}$ .

## TYPES OF ANGLES

Types of Angles



An acute angle is an angle less than  $90^{\circ}$ .

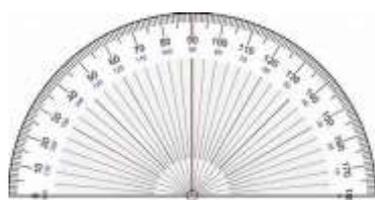
A right angle is an angle equal to  $90^{\circ}$ .

An obtuse angle is an angle greater than  $90^{\circ}$  but less than  $180^{\circ}$ .

A straight angle (or straight line) is an angle equal to  $180^{\circ}$ .

A reflex angle is an angle greater than  $180^{\circ}$  but less than  $360^{\circ}$ .

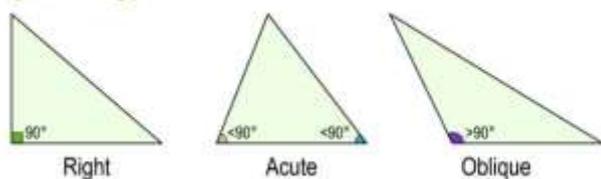
## HOW ARE ANGLES MEASURED?



People usually use a protractor to measure and draw angles. Sometimes, people use an angle ruler or a  $360^{\circ}$  protractor to measure angles.

## ANGLES IN A TRIANGLE

By internal angles

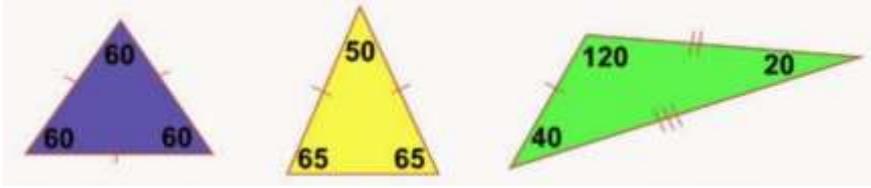


A right triangle (or right-angled triangle) has one of its interior angles measuring  $90^{\circ}$  (a right angle)

Triangles that do not have an angle measuring  $90^{\circ}$  are called oblique triangles.

A triangle with all interior angles measuring less than  $90^{\circ}$  is an acute triangle or acute-angled triangle

A triangle with all interior angles measuring less than  $90^{\circ}$  is an acute triangle or acute-angled triangle



The sum of interior angles in a triangle is  $180^\circ$

OTHER ANGLE FACTS

	<p>Vertically opposite angles are equal.</p>
	<p>The sum of interior angles in a quadrilateral is <math>360^\circ</math></p>
	<p>To find the sum of interior angles in a polygon divide the polygon into triangles.</p> <p>The sum of interior angles in a triangle is <math>180^\circ</math>. To find the sum of interior angles of a polygon, multiply the number of triangles in the polygon by <math>180^\circ</math>.</p>

ANGLES IN LIFE

Angles are used in daily life. Engineers and architects use angles for designs, roads, buildings and sporting facilities. Athletes use angles to enhance their performance. Carpenters use angles to make chairs, tables and sofas. Artists use their knowledge of angles to sketch portraits and paintings. Are you looking to apply what you learn in the classroom to the real world? Trigonometry is a subject that has lots of practical applications. Whether you want to measure how tall a mountain is, navigate the globe or find the distance between stars and planets, learning about this method is useful in many different careers.

FIND OUT MORE...



<https://www.wikihow.com/Use-a-Protractor>

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EXAMPLE QUESTIONS

1. What is an angle?
2. What are angles measured in?
3. Name 5 different types of angles and describe them.
4. How are angles measured?
5. What is the sum of the angles in a quadrilateral?
6. How are angles used in daily life?