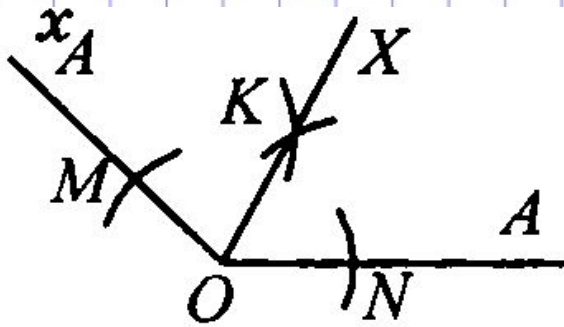
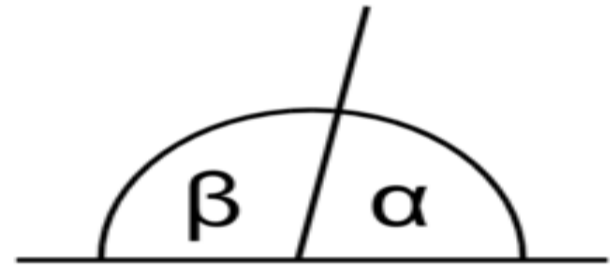


# Angles. Types of angles



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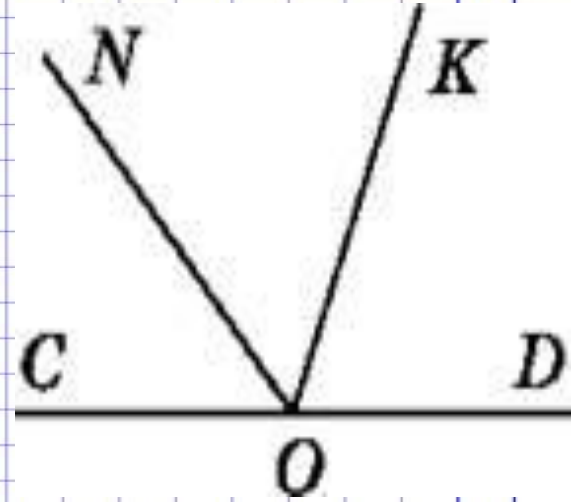
# Content

1. What is the angles?
2. Types of angles
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4. Obtuse angle
5. Non-Convex angle
6. Right angle
7. Extended angle
8. Full angle
9. Angle designation
10. Measure angles
11. Angle bisector
12. Conclusion



# What is the angles?

**Angle** is a geometric figure formed by two rays (sides of an angle) emerging from a single point (which is called the vertex of an angle).



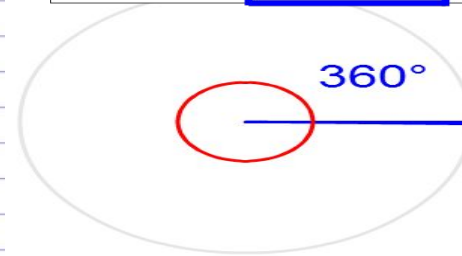
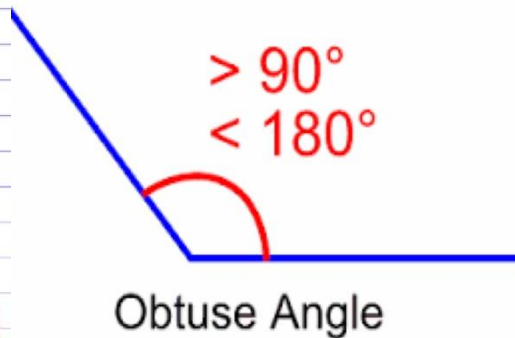
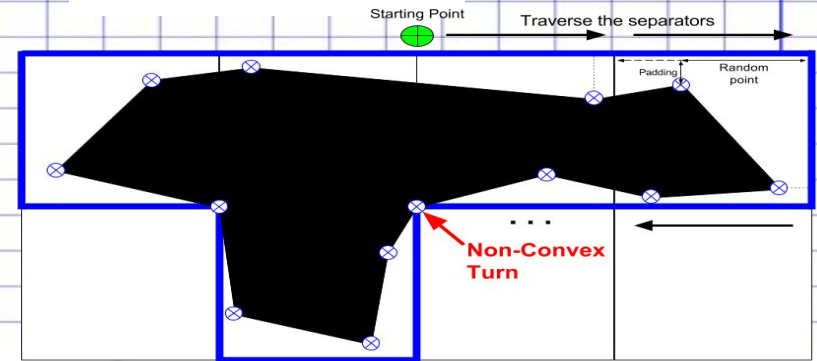
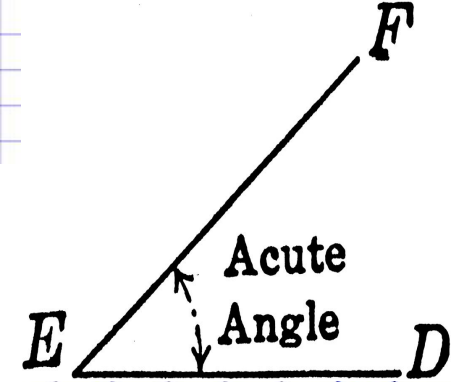
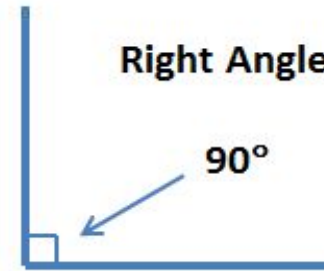
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# Types of angles

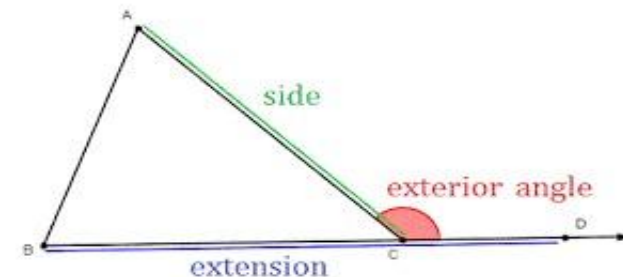
- Acute angles (0-90)
- Obtuse angles(90-180)
- Non-convex angles(180-360)
- Right angles(90)
- Straight angles(180)
- Full angles (360)



Full Rotation

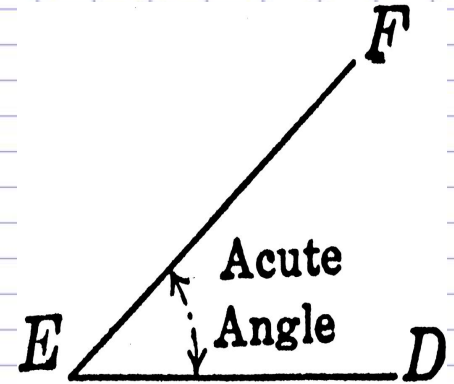


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# Acute angle

The measure of an angle lies between 0 and 90 or with less than 90 is called as **acute angle**



**A**cute

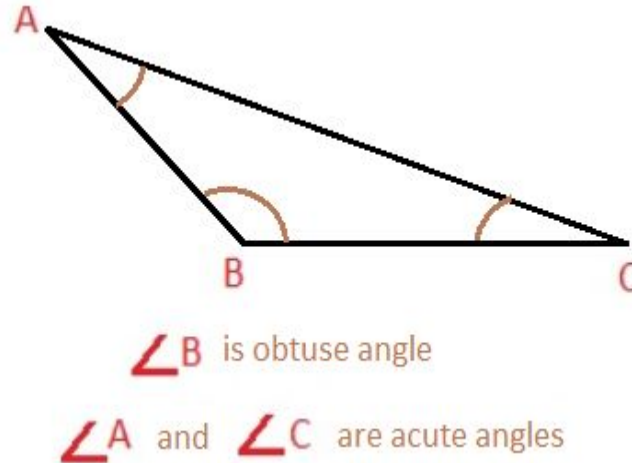
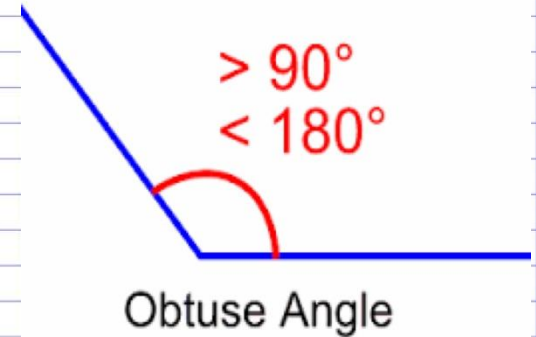
Also: the **letter "A"** has an acute angle



# Obtuse angle

An **Obtuse Angle** is more than  $90^\circ$  but less than  $180^\circ$

A triangle in which one of the angles is an obtuse angle, i.e., **more than 90** (other two angles are acute) is called an **obtuse-angled triangle** or **obtuse triangle**.

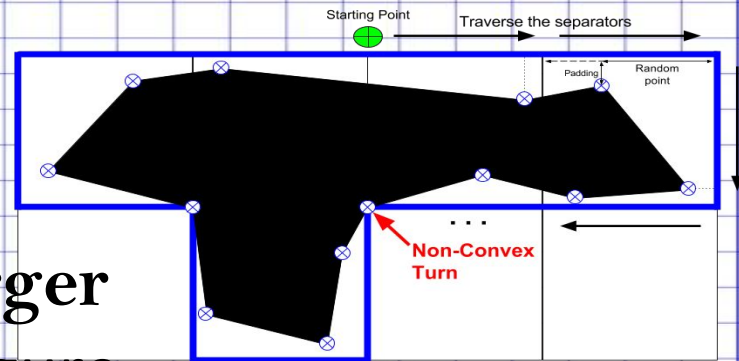




# Non-convex angle

A **Non-convex angle** is more than  $180^\circ$  but less than  $360$

The **non-convex angel** is the larger angle, an unbounded geometric figure formed by two rays (sides of an angle) emerging from a single point (the angle vertex).



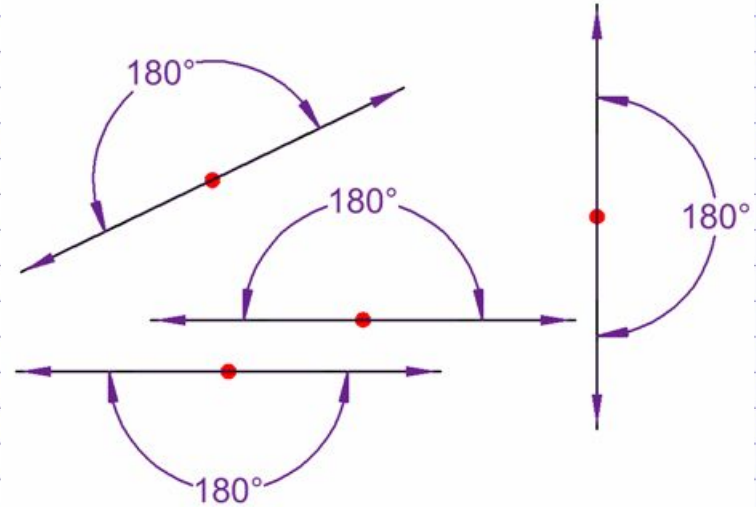
## Straight angles

A straight angle is 180 degrees.

A **straight angle** changes the direction to point the opposite way.

Sometimes people say "**You did a complete 180 on that!**" ...

meaning you completely changed your mind, idea or direction.



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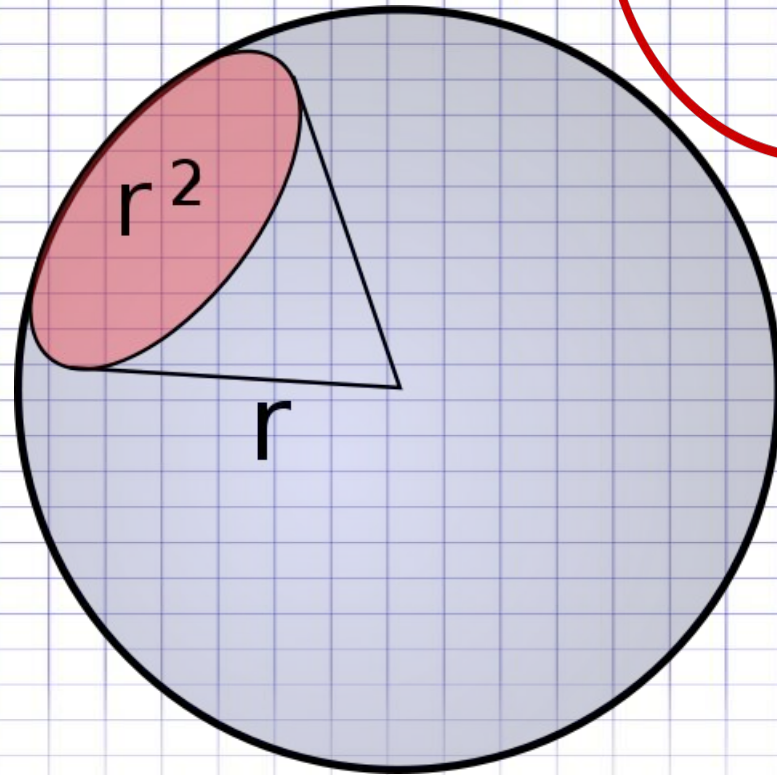


# Full angle

The circle will be  $* 360 = 1^\circ *$   
 $360 = 360^\circ$ .

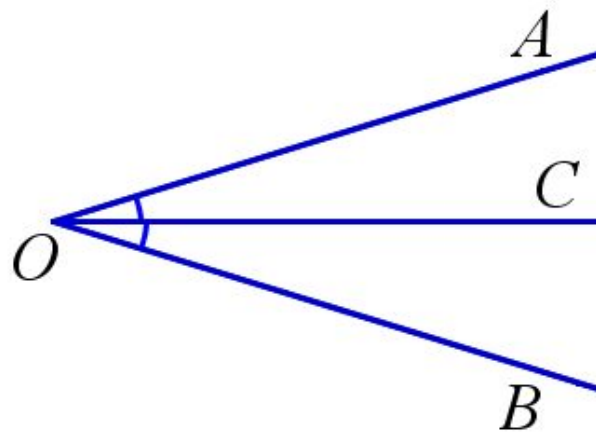
The angle equal to the plane of  
the circle is  $360^\circ$  and is called  
the **full angle**

$360^\circ$



## Bisector of angle

The bisector (from Latin bi-"double", and sectio "cutting") of the angle is a ray emanating from the top of the corner and **dividing the angle into two equal angles**. One can also define a **bisectrix** as the locus of points inside an angle equidistant from the sides of this angle.



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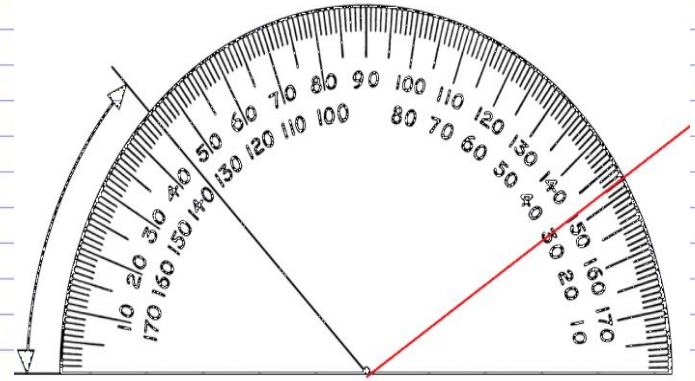


## Measure of angle

A **degree** is called  $1/180$  part of the unfolded angle. **Indicate  $1^\circ$ .**

Degree of angle is **measured by protractor**

**Degree measure of an angle** is a number that indicates how many times it contains **a unit of degree measurement**



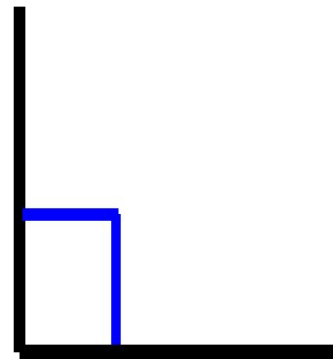
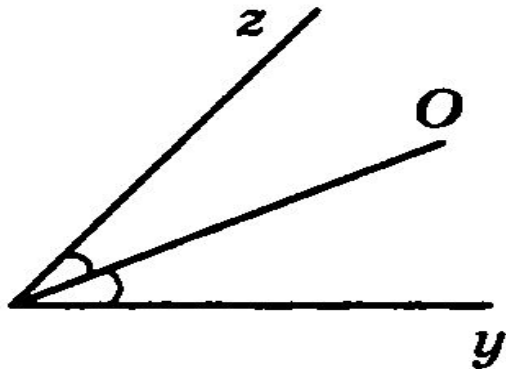


## Angel designation

The sign for angles  $\sphericalangle$  was first introduced in the 18th century by the French mathematician **Erigon Pierre**

Erigon used a sign  $\llcorner$  to denote a right angle

The first designation of the angle was invented by the French mathematician **Erigon Pierre**



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# Conclusion

1. Angle is a geometric figure formed by two rays
2. Type of angles: acute angle, obtuse angle, non-convex angle, right angles, extended angle and full angles.
3. Each corner has its own degree measure
4. The first designation of the angle was invented by the French mathematician Erigon Pierre



Geometry

