

# DEFINITIONS

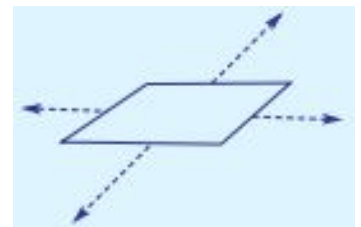
- A **POINT** is usually labelled with a capital letter.



- A **LINE** passing through two points A and B can be called line AB or line BA and extends indefinitely in both directions.

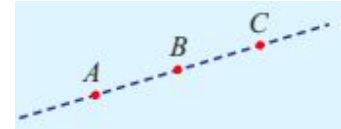


- A **PLANE** is a flat surface which extends indefinitely



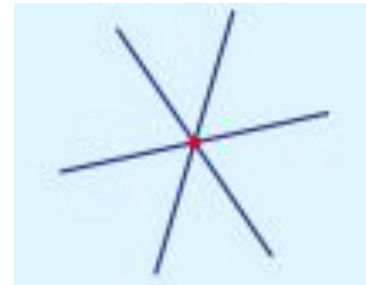
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- Points that all line on a single line are called **collinear**.



- If two lines meet, an **intersection point** is formed.

- More than two lines that meet at the same point are **concurrent**.

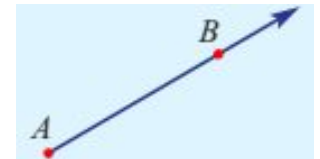


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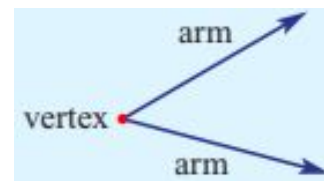
- A **line segment** or **interval** is part of a line with a fixed length.      example: segment AB



- A **ray AB** is a part of a line with one end point A and passing through point B. It extends indefinitely in one direction.

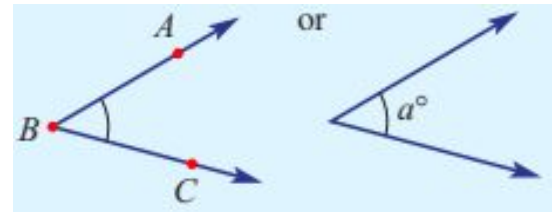


- When two rays meet, an **angle** is formed at the intersection point called the vertex. The two rays are called **arms of the angle**.



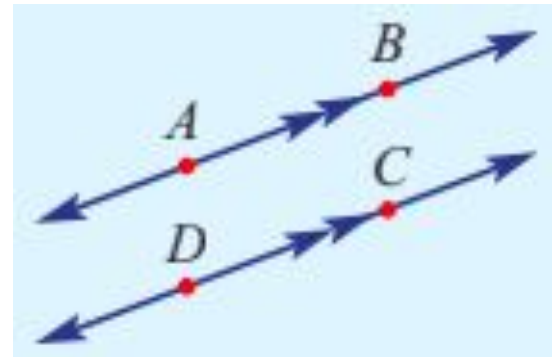
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- An angle is named using three points, with the vertex as the middle point. A common type of notation is  $\angle ABC$  or  $\angle CBA$



- Lower-case letters are often used to represent the numbers of degrees in an angle.

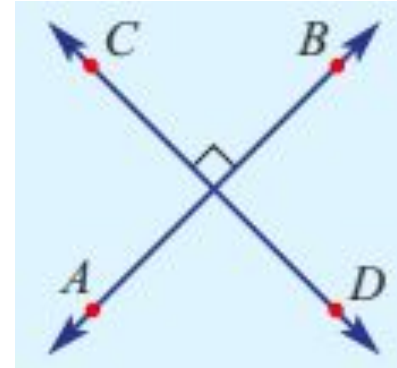
- The two lines are **parallel**.  
This is written  **$A \parallel B$**



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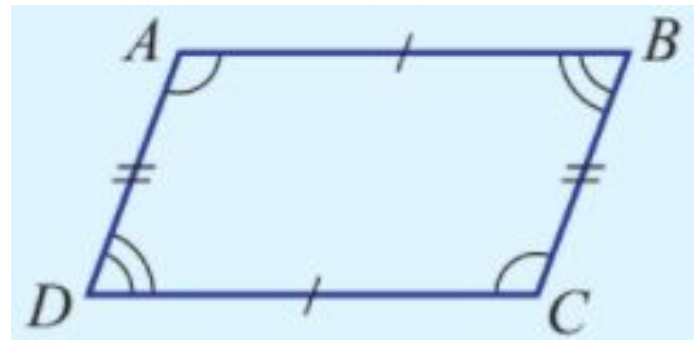
- These two lines are **perpendicular**.

This is written  **$AB \perp CD$**



- The markings on this diagram show that:

- $AB = CD$
- $AD = BC$
- $\angle BAD = \angle BCD$
- $\angle ABC = \angle ADC$



# MEASURING AND CLASSIFYING ANGLES

Angles are classified according to their size.

**right**

$90^\circ$



**straight**

$180^\circ$



**revolution**

$360^\circ$



# MEASURING AND CLASSIFYING ANGLES

**acute**

between  $0^\circ$  and  $90^\circ$



**obtuse**

between  $90^\circ$  and  $180^\circ$



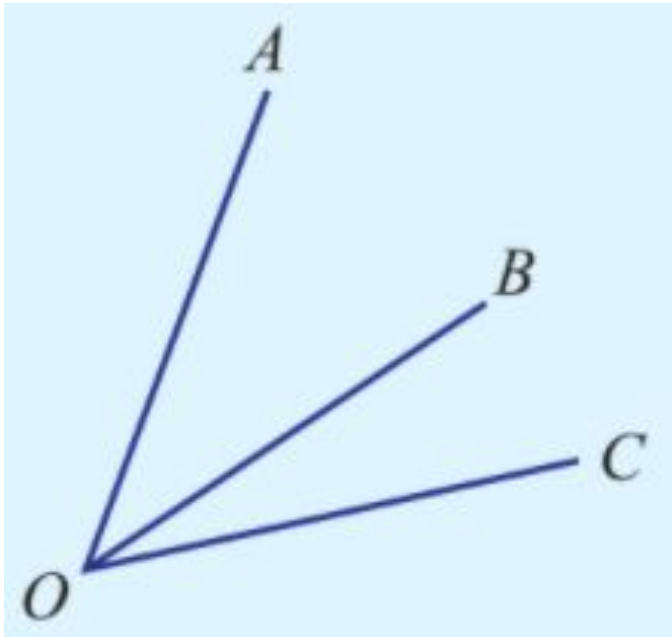
**reflex**

between  $180^\circ$  and  $360^\circ$



## ADJACENT ANGLES

Adjacent angles are side by side; they share a vertex and an arm.

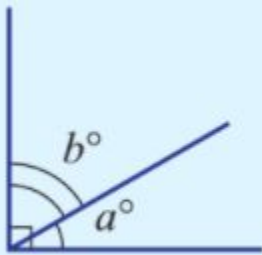


$\angle COB = \angle BOA$  are adjacent



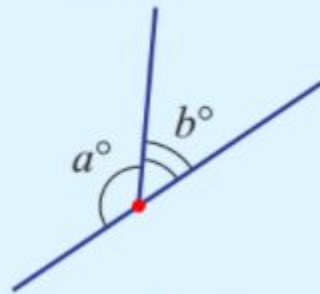
# COMPLEMENTARY, SUPPLEMENTARY AND REVOLUTION ANGLES

**Complementary** adjacent angles sum to  $90^\circ$ .



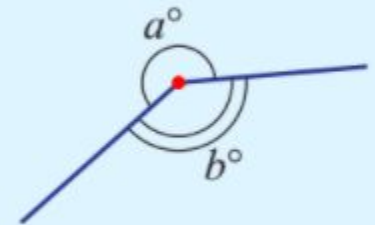
$$a + b = 90$$

■ **Supplementary** adjacent angles sum to  $180^\circ$ .



$$a + b = 180$$

■ Angles in a **revolution** sum to  $360^\circ$ .



$$a + b = 360$$