

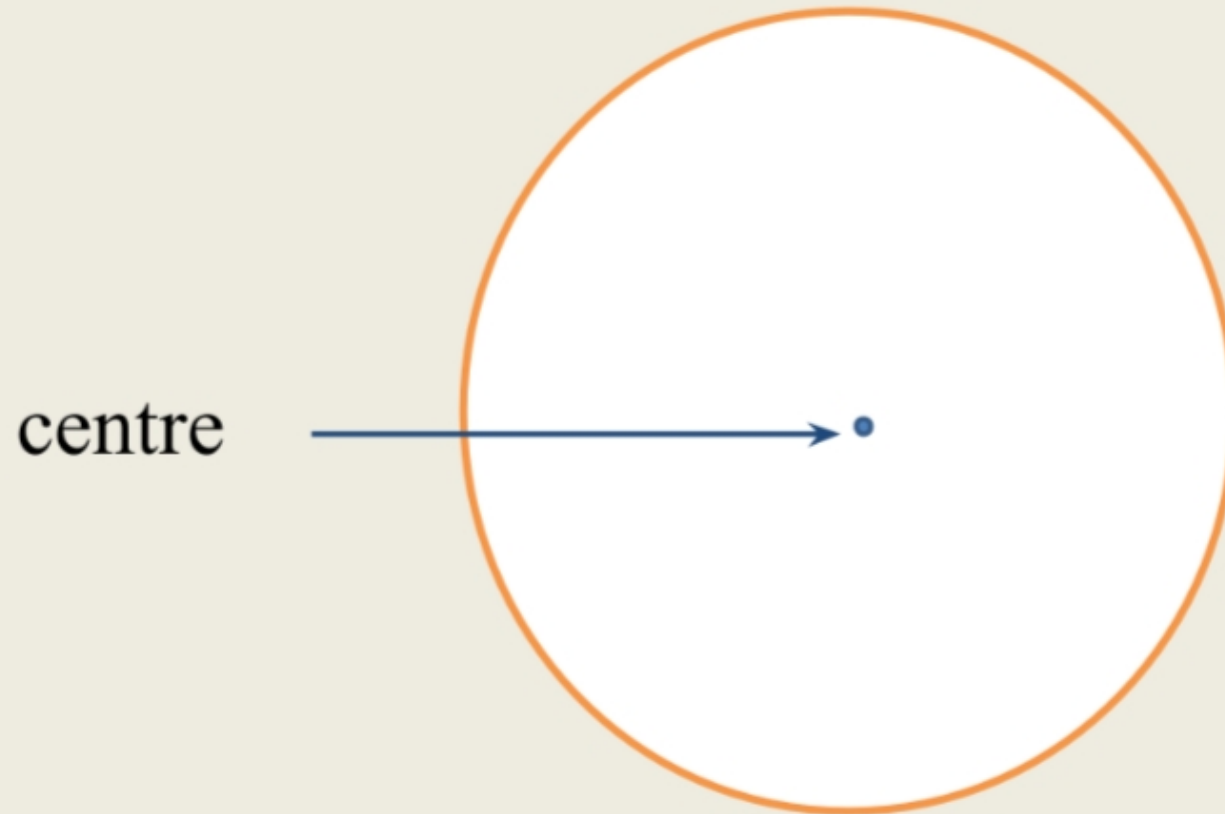
What is a Circle?

A **circle** is a closed curve in a plane.

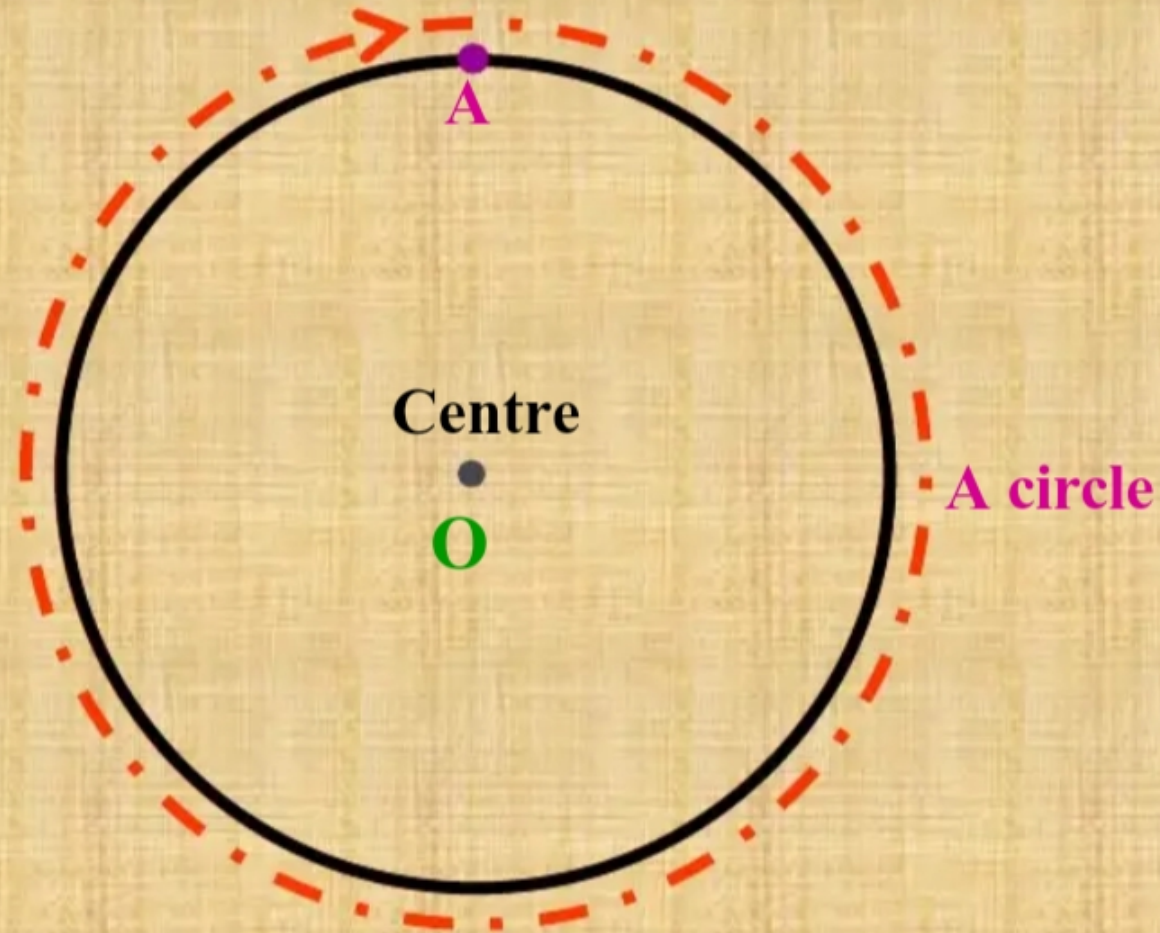


A circle can be drawn with the help of a circular object.
For example: A circle drawn with the help of a coin.

The midpoint of a circle is

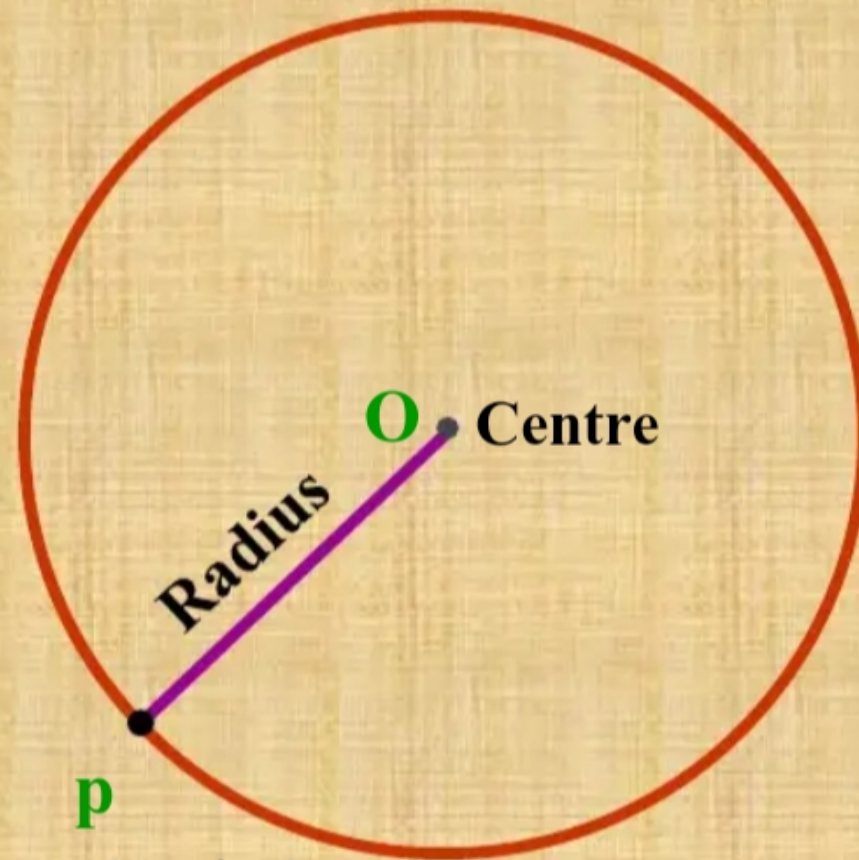


CIRCUMFERENCE



The distance around a circle is called its **circumference**.

RADIUS

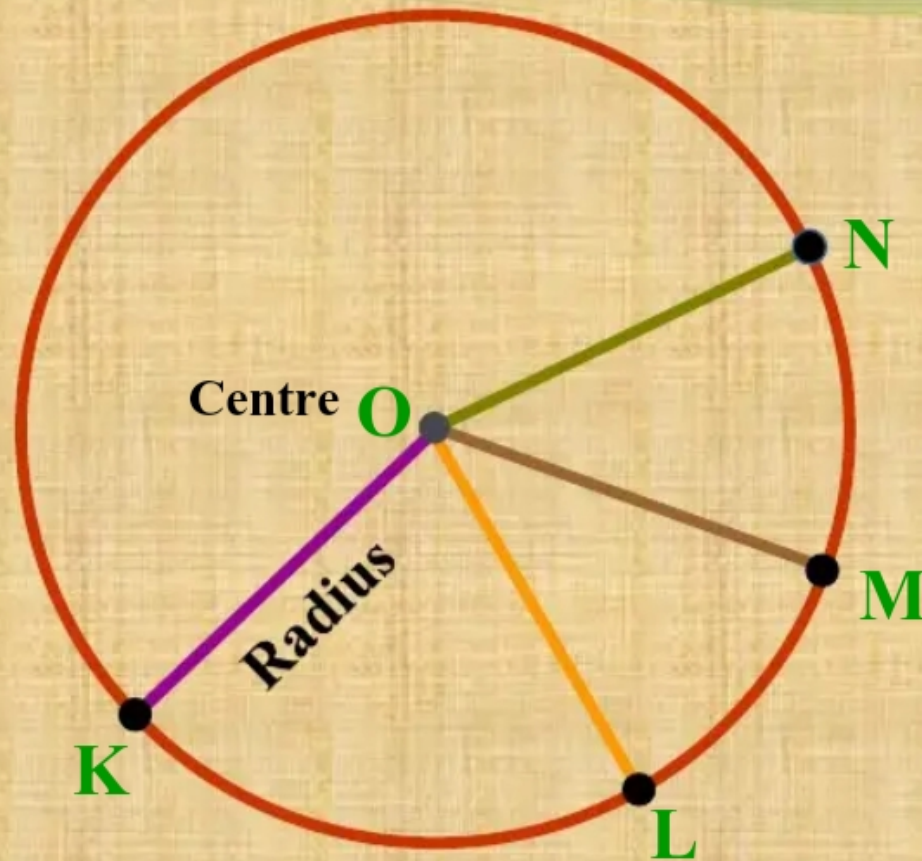


A point on the circle

A line segment that joins any point on the circle to its centre is called a radius.

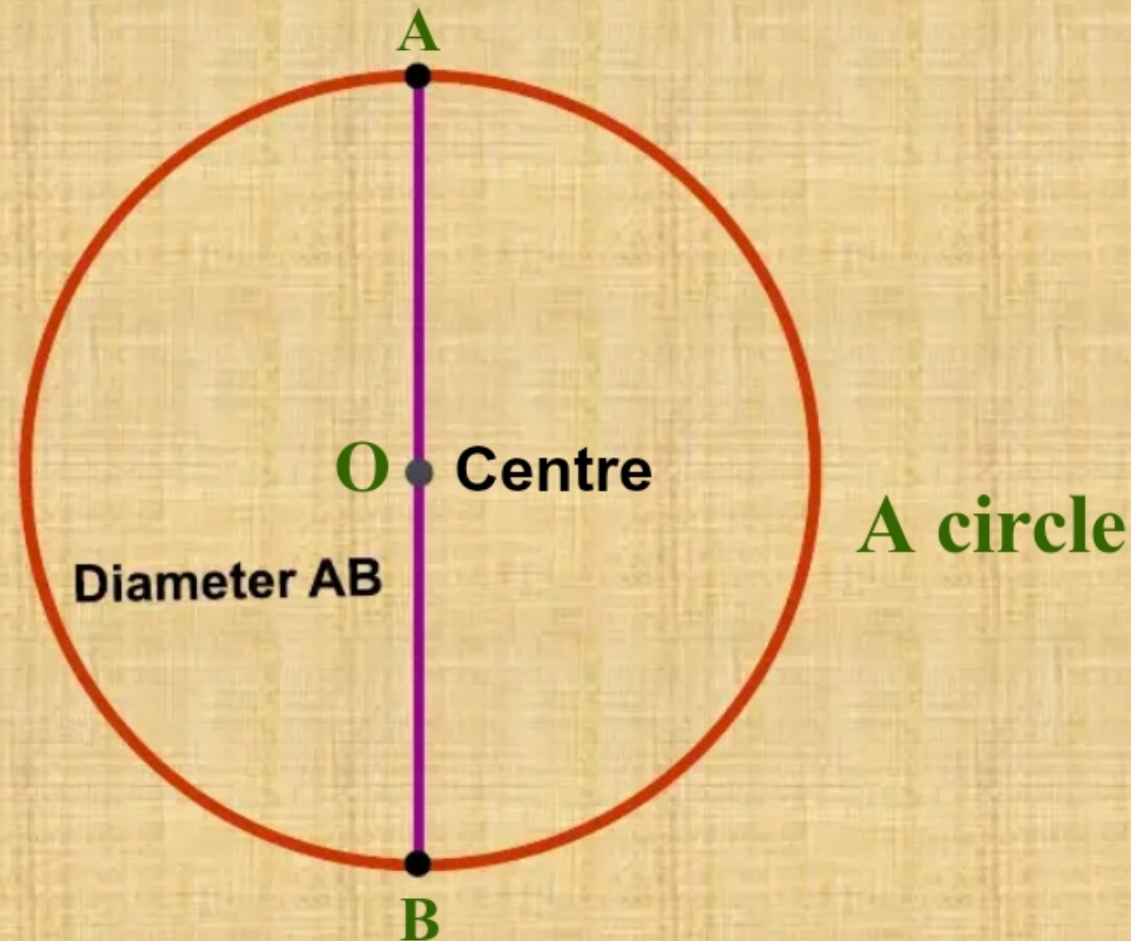
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- Radii (*plural of radius*) of a circle are **equal in length**.
- **Infinite** number of radius can be drawn in a circle.

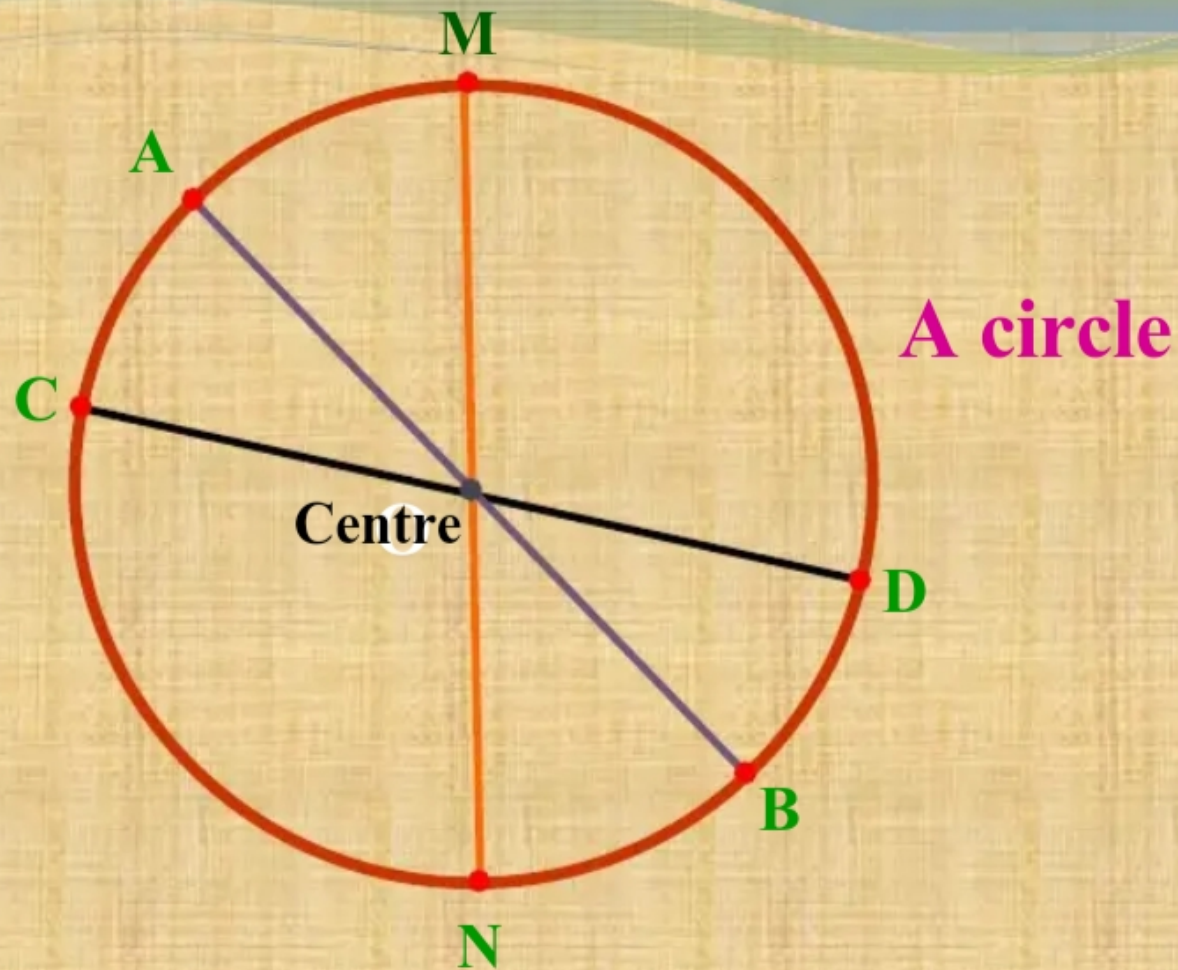
DIAMETER



A **line segment** that joins any two points on the circle and passes through its **centre** is called a **diameter**.

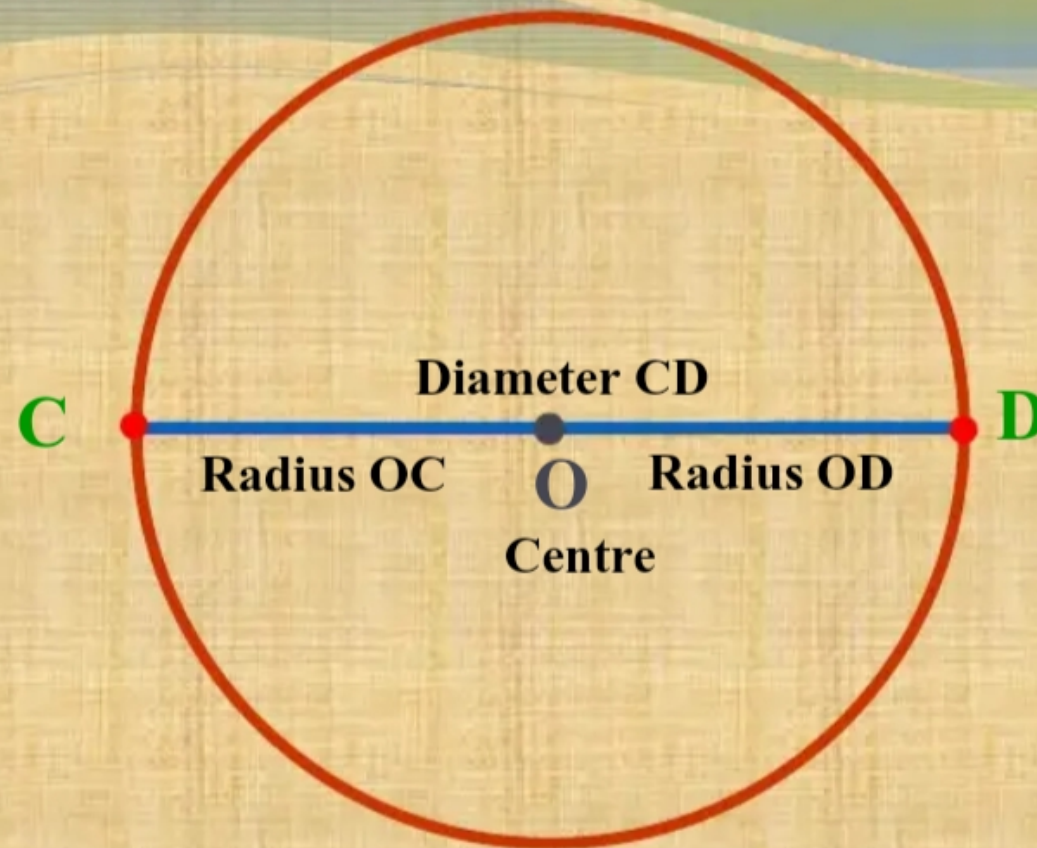
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- **Infinite** number of diameters can be drawn in a circle.
- As the radii of a circle are equal in length, its **diameters too are equal in length.**

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Radius OC = Radius OD

Diameter CD = Radius OC + Radius OD

The length of the diameter of a circle is twice the length of its radius.

CHORD

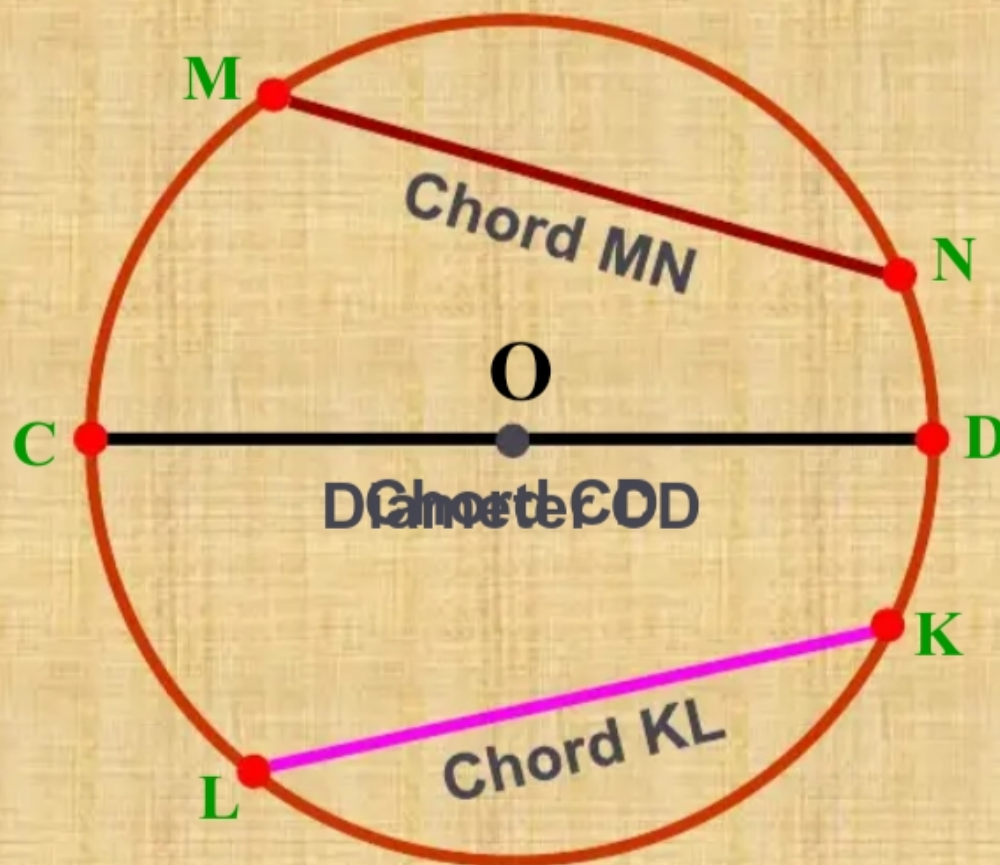
M is a point on the circle

N is another point on the circle



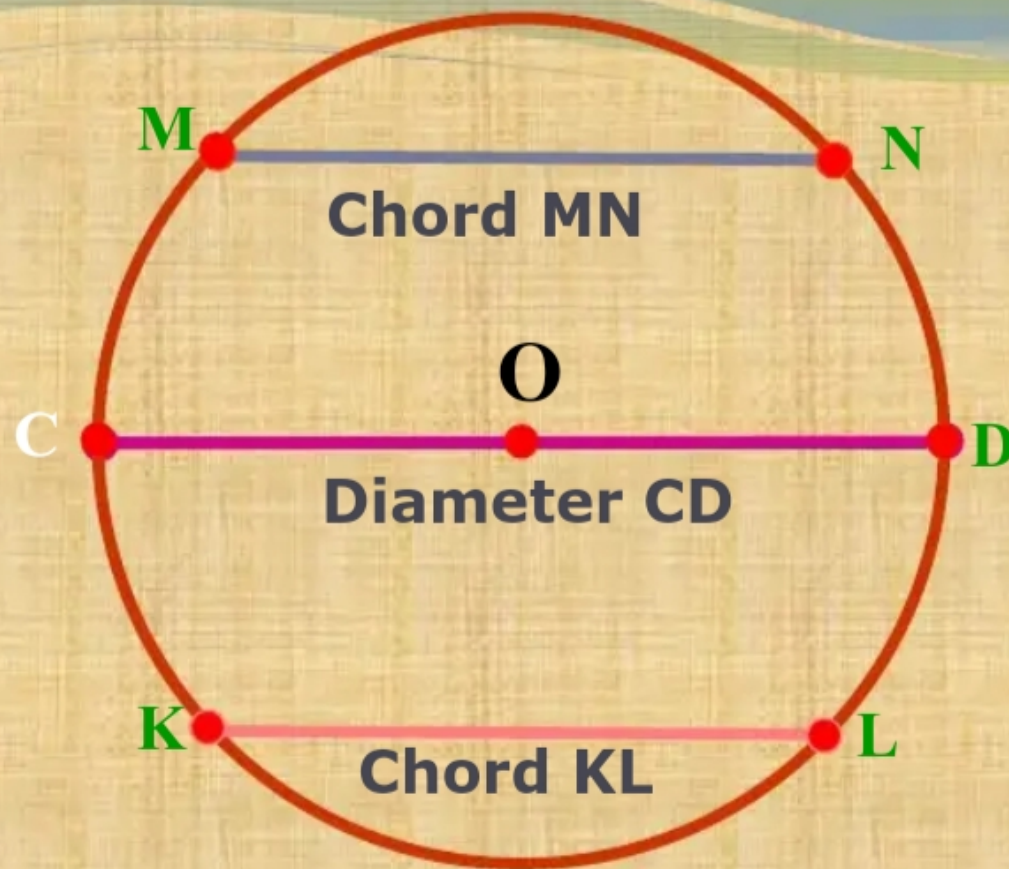
A line segment that joins point M and N

A **line segment** that joins any two points on the circle is called a **chord**.



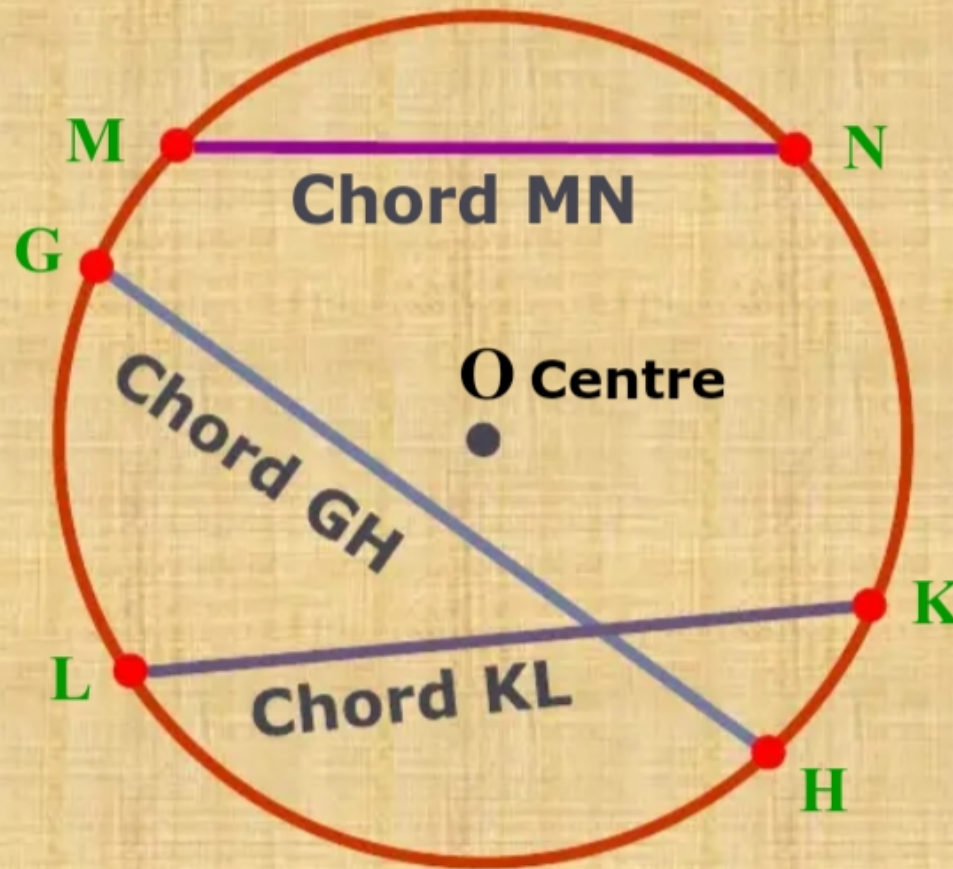
Diameter is also a chord of the circle.

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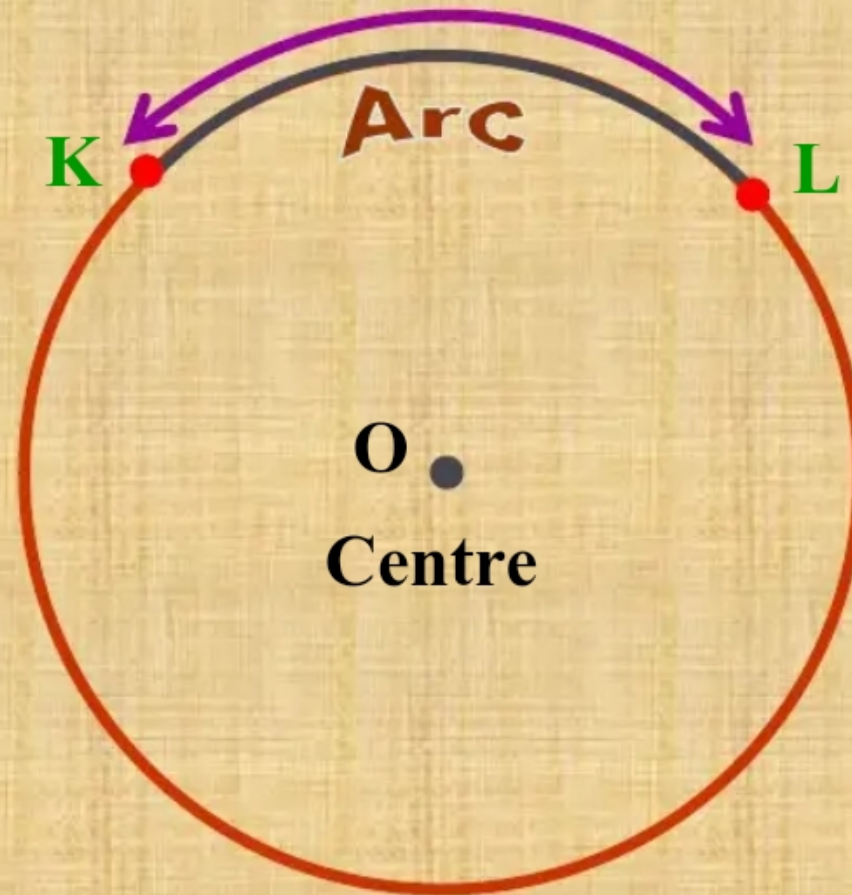
The diameter is the **longest chord**.

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Infinite number of chords can be drawn in a circle.

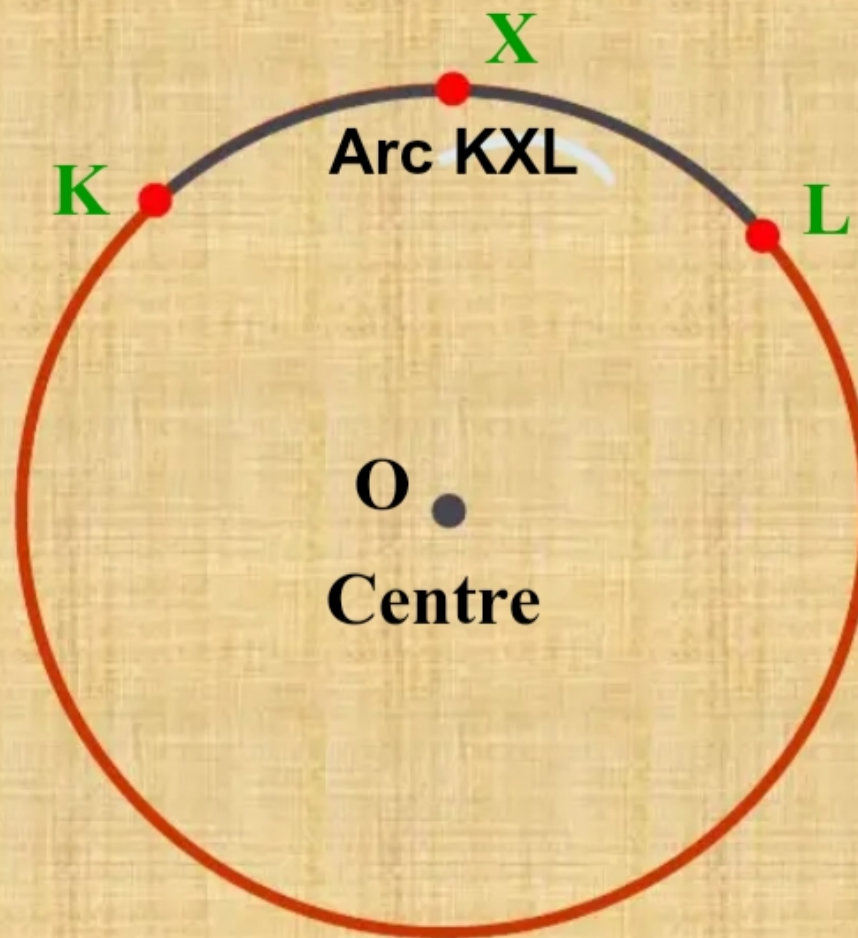
ARC



An **arc** is the distance between any two points on the circumference of a circle.

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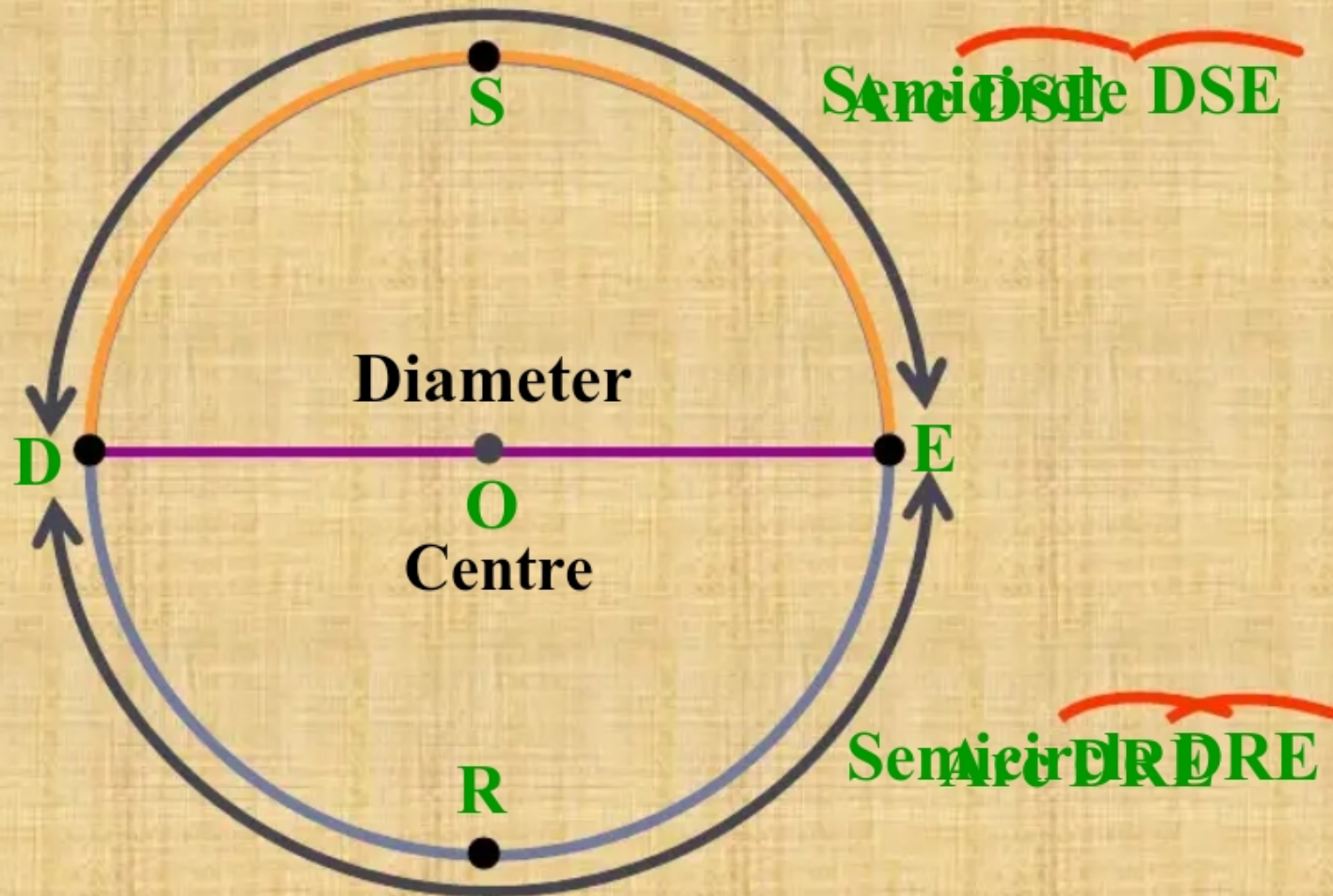
Naming an arc



An arc is **named by three points**, of which two are the end points of the arc and the third one lies in between them.

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SEMICIRCLE

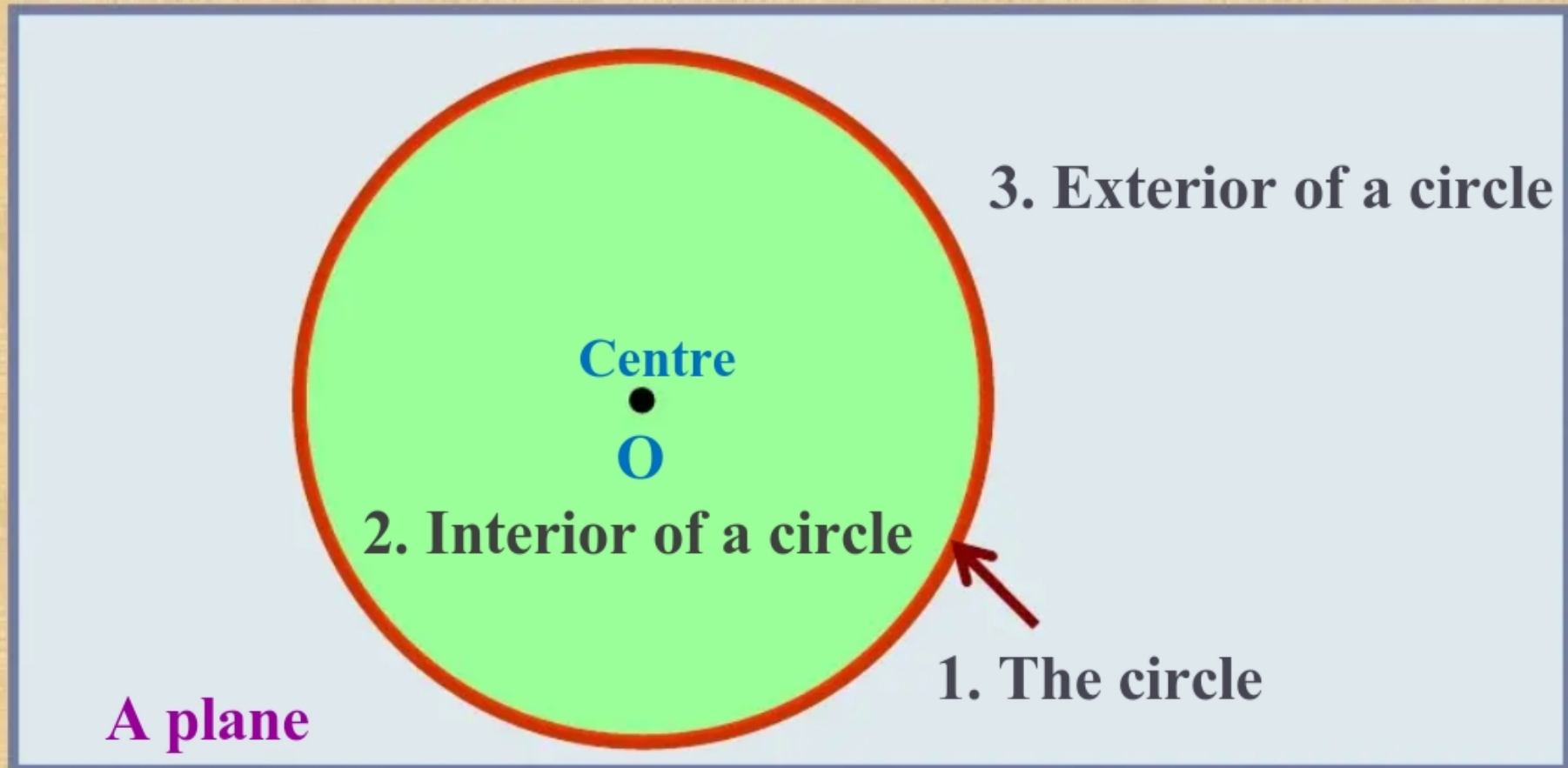


- Half of a circle is called a semicircle.
- A semicircle is also an arc of the circle.

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CIRCULAR REGION

A circle divides a plane into **three** parts.



The interior of a circle together with its circumference is called the **circular region**.

Sector

A **sector** is a region contained by two radii and an arc.

