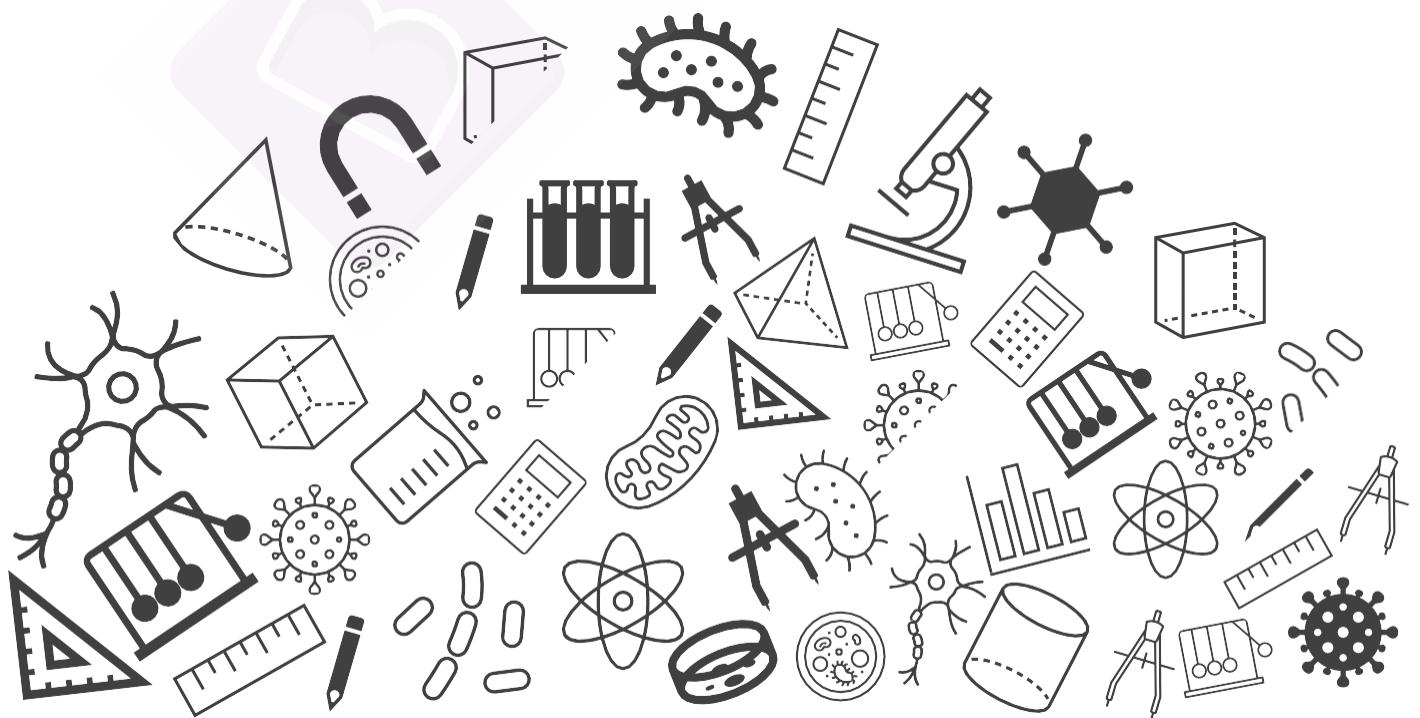




BYJU'S

Grade 07: Maths Chapter Notes



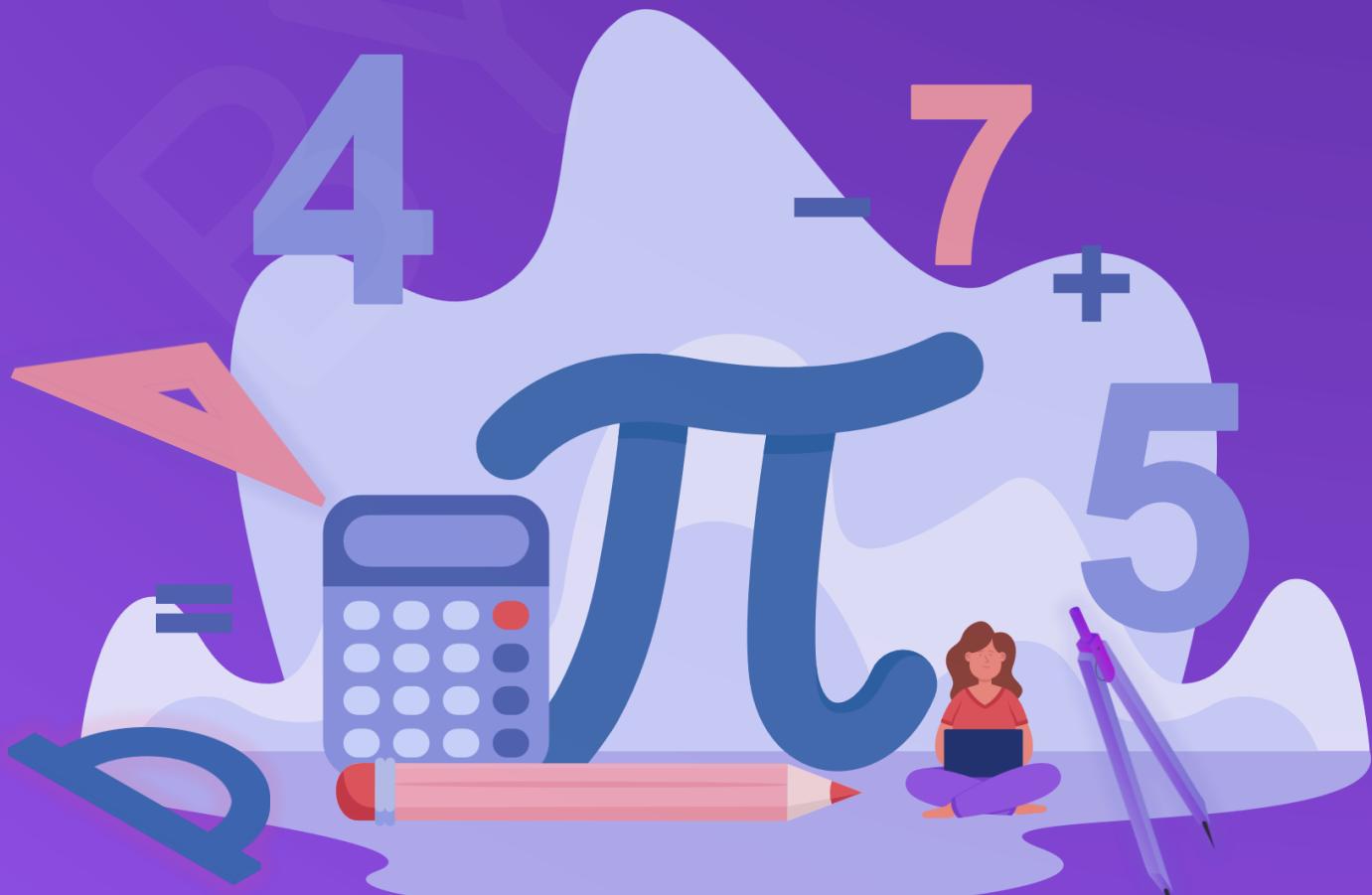


BYJU'S Classes

Chapter Notes

Perimeter and Area

Grade 07





Topics to be Covered

1. Parallelogram

- 1.1. Area of a parallelogram

2. Triangle

- 2.1. Area of a triangle
- 2.2. Triangle as parts of a rectangle

3. Circle

- 3.1. Circumference of a circle
- 3.2. Area of a circle



Mind Map

Perimeter and Area

Parallelogram

→ Area of a parallelogram

Triangle

→ Area of a triangle
→ Triangle as parts of a rectangle

Circle

→ Circumference of a circle
→ Area of a circle

1. Parallelogram

1.1. Area of a parallelogram

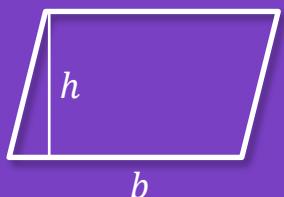


Area of a parallelogram = Area of a rectangle
= $SP \times PQ$
= $DE \times AB$
= Height(h) \times Corresponding Base(b)

2. Triangle

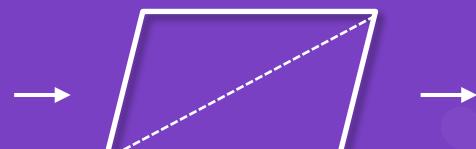
2.1. Area of a triangle

Parallelogram



$$\text{Area} = b \times h$$

Parallelogram



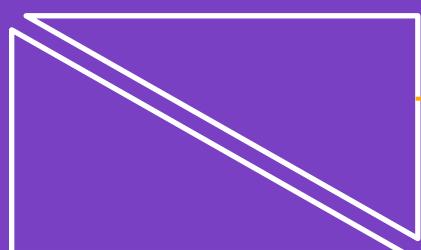
Diagonal divides
it into two triangles
of equal area

Triangle



$$\text{Area} = \frac{1}{2} \times b \times h$$

2.2. Triangle as parts of rectangle



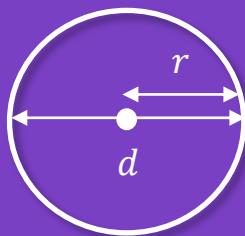
Same size
Congruent
Equal area

$$\text{Area of a triangle} = \frac{1}{2} \times (\text{Area of a rectangle})$$

$$= \frac{1}{2} \times (\text{length} \times \text{breadth})$$

3. Circle

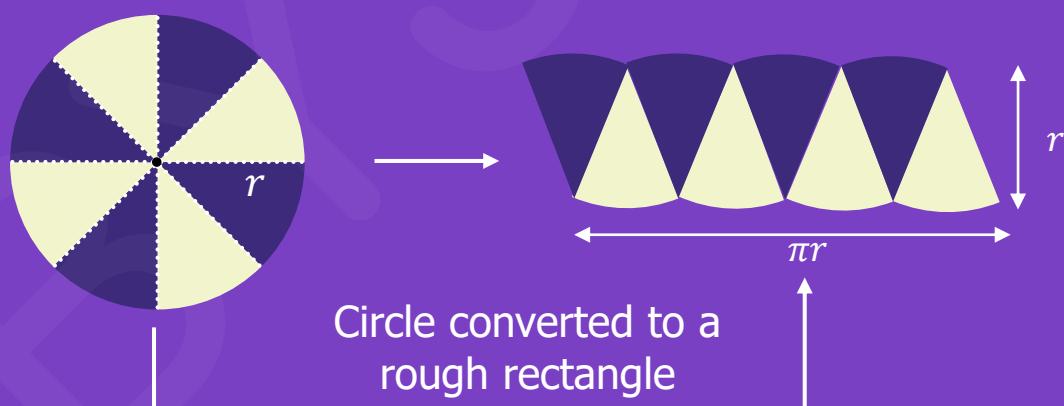
3.1. Circumference of a Circle



Circumference of a circle is its perimeter.

$$\begin{aligned}\text{Circumference} &= \pi \times d \\ &= \pi \times 2(r) \\ &= 2\pi r\end{aligned}$$

3.2. Area of a Circle



[The more sectors we have, the nearer we reach an appropriate rectangle]

$$\begin{aligned}\text{Area of a circle} &= \pi r \times r \\ &= \pi r^2 \\ &= \pi \times (\text{radius})^2\end{aligned}$$