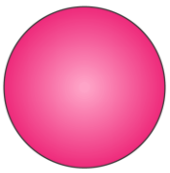
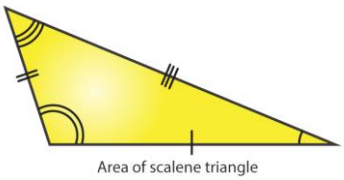
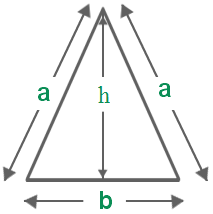
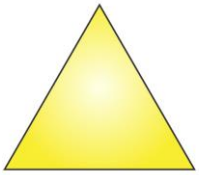
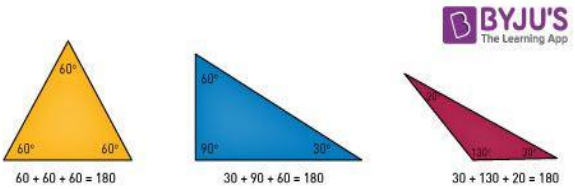
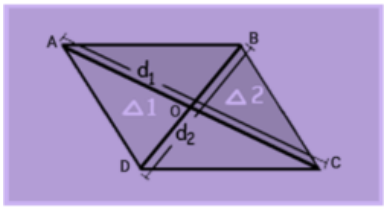
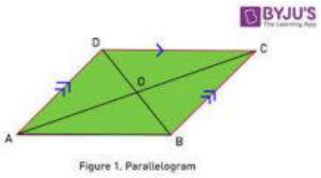
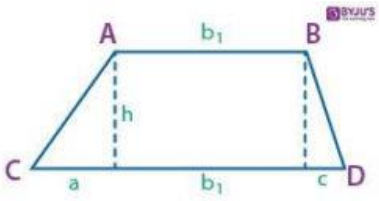
Mensuration in Maths- Important Terminologies

Let's learn a few more definitions related to this topic.

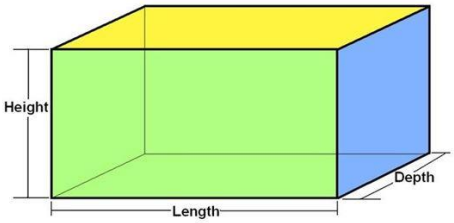
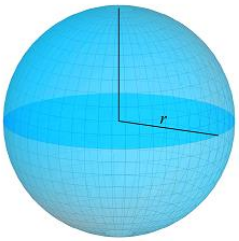
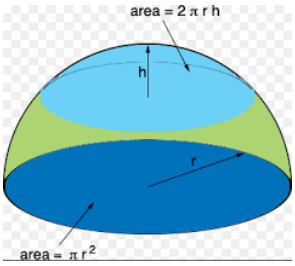
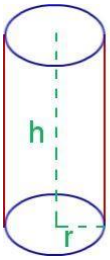
Terms	Abbreviation	Unit	Definition
Area	A	m^2 or cm^2	The area is the surface which is covered by the closed shape.
Perimeter	P	cm or m	The measure of the continuous line along the boundary of the given figure is called a Perimeter.
Volume	V	cm^3 or m^3	The space occupied by a 3D shape is called a Volume.
Curved Surface Area	CSA	m^2 or cm^2	If there's a curved surface, then the total area is called a Curved Surface area. Example: Sphere
Lateral Surface area	LSA	m^2 or cm^2	The total area of all the lateral surfaces that surrounds the given figure is called the Lateral Surface area.
Total Surface Area	TSA	m^2 or cm^2	The sum of all the curved and lateral surface areas is called the Total Surface area.
Square Unit	–	m^2 or cm^2	The area covered by a square of side one unit is called a Square unit.
Cube Unit	–	m^3 or cm^3	The volume occupied by a cube of one side one unit

Mensuration Formulas For 2D Shapes

Shape	Area (Square units)	Perimeter (units)	Figure
Square	a^2	4a	
Rectangle	$l \times b$	$2 (l + b)$	
Circle	πr^2	$2 \pi r$	

Shape	Area (Square units)	Perimeter (units)	Figure
Scalene Triangle	√[s(s−a)(s−b)(s−c)], Where, s = (a+b+c)/2	a+b+c	
Isosceles Triangle	½ × b × h	2a + b	
Equilateral Triangle	$(\sqrt{3}/4) \times a^2$	3a	
Right Angle Triangle	½ × b × h	b + hypotenuse + h	
Rhombus	½ × d_1 × d_2	4 × side	
Parallelogram	b × h	2(l+b)	
Trapezium	½ h(a+b)	a+b+c+d	

Mensuration Formulas for 3D Shapes

Shape	Volume (Cubic units)	Curved Surface Area (CSA) or Lateral Surface Area (LSA) (Square units)	Total Surface Area (TSA) (Square units)	Figure
Cube	a^3	–	$6\ a^2$	
Cuboid	$l \times w \times h$	–	$2\ (lb + bh + hl)$	
Sphere	$(4/3)\ \pi\ r^3$	$4\ \pi\ r^2$	$4\ \pi\ r^2$	
Hemisphere	$(⅔)\ \pi\ r^3$	$2\ \pi\ r^2$	$3\ \pi\ r^2$	
Cylinder	$\pi\ r^2\ h$	$2\pi\ r\ h$	$2\pi rh + 2\pi r^2$	
Cone	$(⅓)\ \pi\ r^2\ h$	$\pi\ r\ l$	$\pi r\ (r + l)$