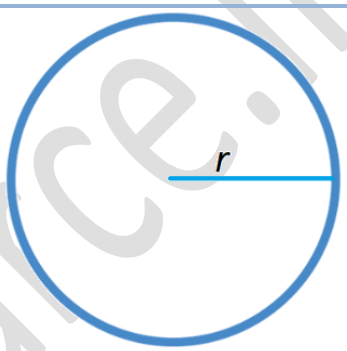
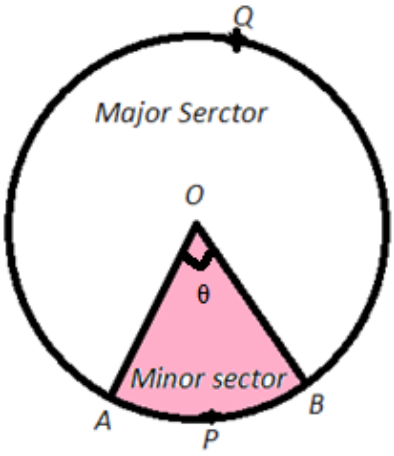
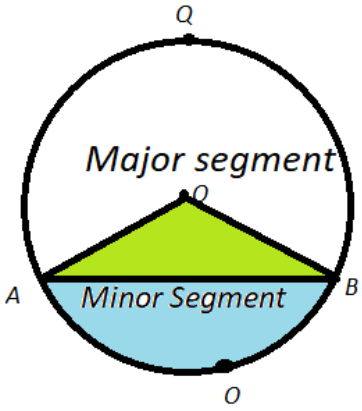
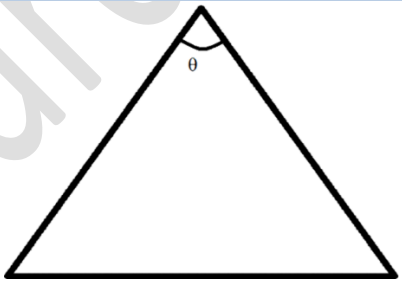
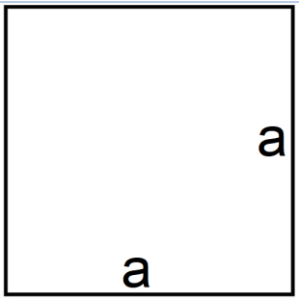
Chapter: - 12
AREAS RELATED TO CIRCLES
Formulas

SR. NO.	Formula	Shape
a)	1. Circumference/ Perimeter of the circle = $2\pi r$ 2. Area of the circle = πr^2 3. Area of Semicircle = $\frac{1}{2}\pi r^2$	
b)	1. Area of Minor sector of angle θ= $\frac{\theta}{360}\pi r^2$ 2. Area of Major Sector = (area of circle – Area minor Setor) = $(\pi r^2 + \frac{\theta}{360}\pi r^2)$ 3. length of an arc of a sector of angle θ = $\frac{\theta}{360}2\pi r$	

c)	1. Area of minor Segment = (Area of Minor sector – Area of triangle) = $(\frac{\theta}{360}\pi r^2 - \frac{1}{2}(base\ X\ height)$ 2. Area of Major Sector = (Area of circle – Area of Minor Sector) = $(\pi r^2 - \frac{\theta}{360}\pi r^2 - \frac{1}{2}(base\ X\ height)$	
d)	1. Area of triangle = $\frac{1}{2}(base\ X\ height)$ Or $\frac{sin\theta}{2}(side)^2$	
e)	1. Area of square = $(side)^2 = (a)^2$ 2. Perimeter of Square = sum of all sides (4a)	
f)	1. Area of rectangle = (length x breadth) = (L x B) 2. Perimeter of rectangle = (sum of all sides) = 2 (L + B)