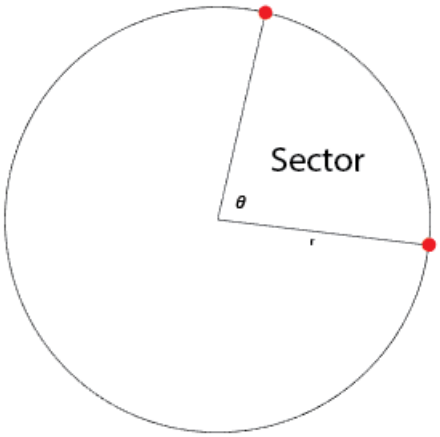
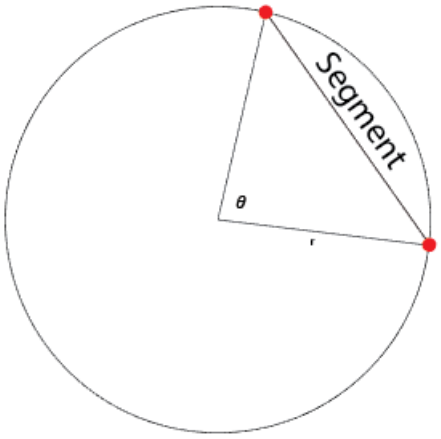
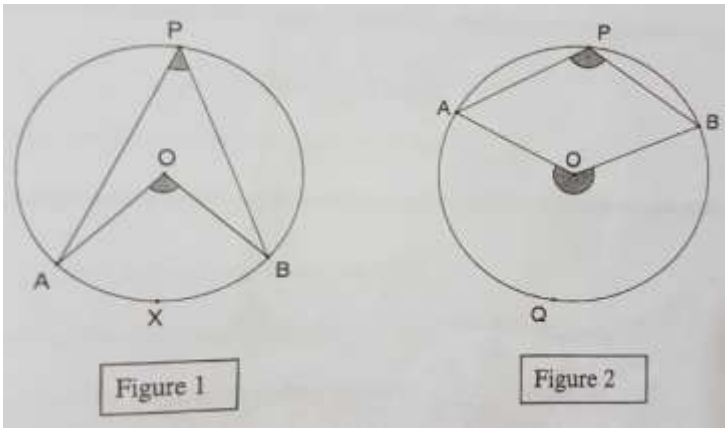
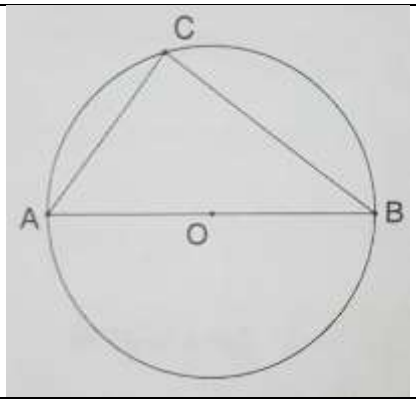
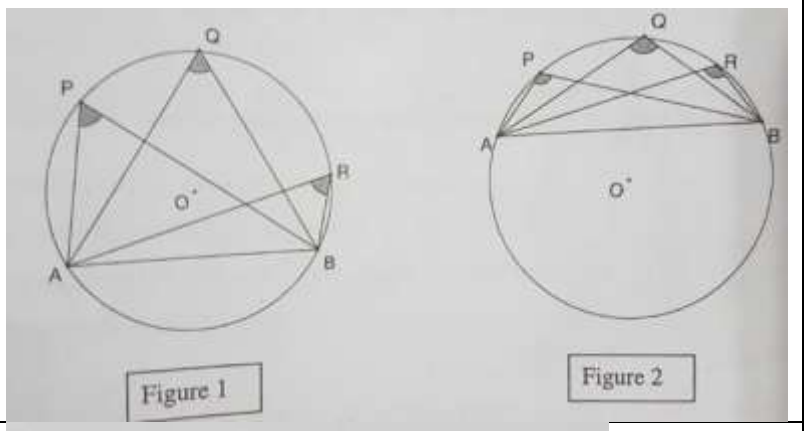
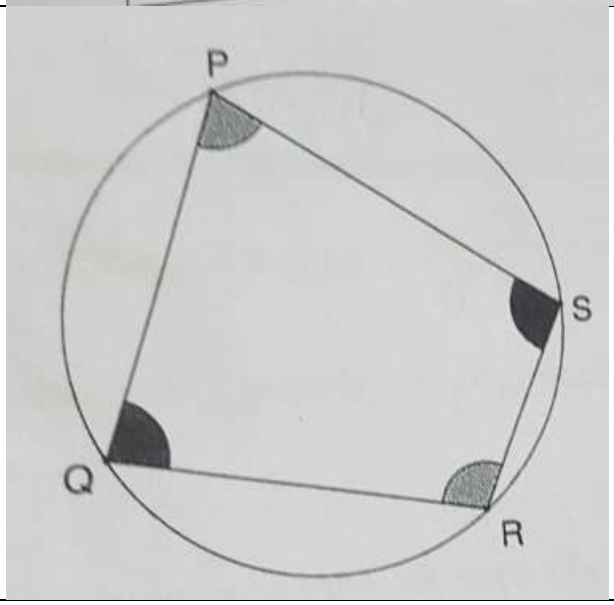
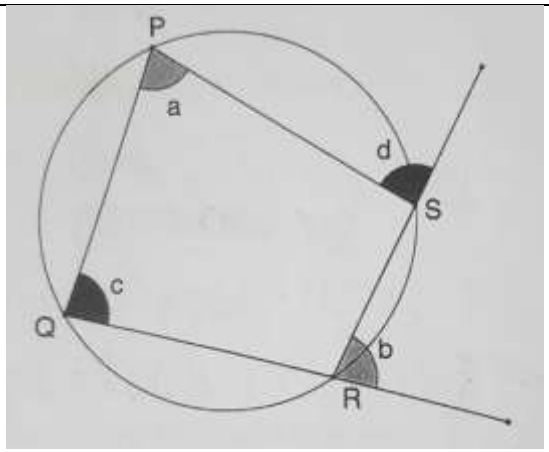
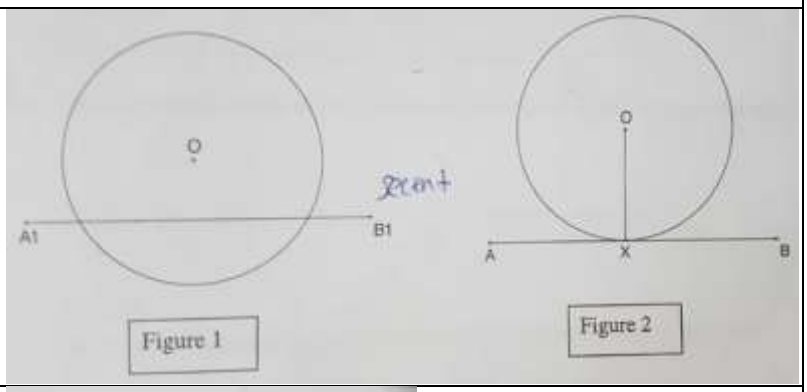
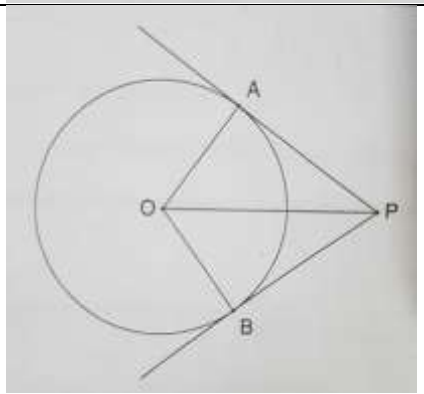
Circle

1	$\pi\ rad \approx 180°$ $2\pi\ rad \approx 360°$ $1\ rad \approx 57.3°$	
2	$Arc\ Length = \frac{\theta°}{360°} * 2\pi r$ $Area\ of\ Sector = \frac{\theta°}{360°} * \pi r^2$ Radian: $Arc\ Length = \theta r$ $Area\ of\ Sector = \frac{1}{2}\theta r^2$	
3	$Area\ of\ Segment = \frac{\theta°}{360°} * \pi r^2 - \frac{1}{2} r^2 sin\theta$ Radiant: $Area\ of\ Segment = \frac{\theta°}{360°} * \pi r^2 - \frac{1}{2} r^2 sin\theta$	

8 Geometrical Properties of circles

1	Angle at the center of the circle is 2x the angle at the circumference subtended by the same arc: Angle at center = 2x angle at segment $\Delta AOB = 2\ \Delta APB$	

2	Every angle subtended by the diameter of a semicircle is a 90 degree: Right Angle of Semi-circle $\Delta ACB = 90°$	
3	Angle in the same segment of a circle have the same angle: Angle in the same segment $\Delta APB = \Delta AQB = \Delta ARB$	
4	In a cyclic quadrilateral, the opposite angle add up to 180 degree: Opposite angle of cycle quad. $\Delta Q + \Delta S = 180°$ $\Delta P + \Delta R = 180°$	

5	If one side of a cyclic quadrilateral is produced, the exterior angle formed is the same to the interior opposite angle: Ext. angle of cycle quad. $\Delta a = \Delta b$ $\Delta c = \Delta d$	
6	A tangent to a circle is perpendicular to the radius Tangent perpendicular to radius $\Delta AXO = \Delta BXO = 90°$	
7	Tangent from external point Congruent Triangle $\Delta OAP = \Delta OBP = 90°$ $\Delta APO = \Delta BPO = 30°$ $\Delta AOP = \Delta BOP = 60°$	
8	An angle between a tangent and a chord through the point of contact is the same to the angle in the alternate segment Alternate Segment Theorem $\Delta YPX = \Delta YXN$ $\Delta RQX = \Delta RXN$