**Circle Measure**

## Geometrical Properties of Circles

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| 1 | Degree:  Radian: |  |
| 2 | Degree:  Radiant: |  |

## Geometrical Properties of circles

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| Angle at the center of the circle is 2x the angle at the circumference subtended by the same arc: 1 Angle at center = 2x angle at segment |  |
| Every angle subtended by the diameter of a semicircle is a 90 degree: 2 Right Angle of Semi-circle |  |
| Angle in the same segment of a circle have the same angle: 3 Angle in the same segment |  |
| In a cyclic quadrilateral, the opposite angle add up to 180 degree: 4 Opposite angle of cycle quad |  |
| If one side of a cyclic quadrilateral is produced, the exterior angle formed is the same to the interior opposite angle: 5 Ext. angle of cycle quad |  |
| A tangent to a circle is perpendicular to the radius 6 Tangent perpendicular to radius |  |
| Tangent from external point 7 Congruent Triangle |  |
| An angle between a tangent and a chord through the point of contact is the same to the angle in the alternate segment 8 Alternate Segment Theorem |  |
| 9 By Simmental Properties |  |
| 10 Equal chords are equitant from the center |  |