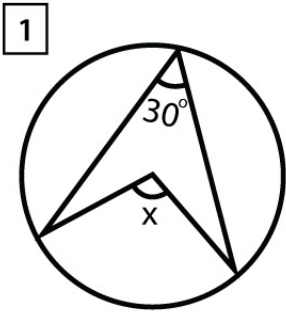


Name : _____

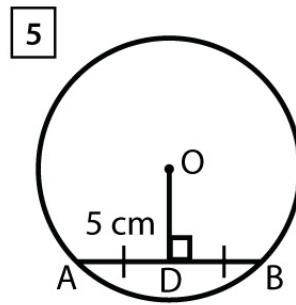
Score : _____ Date : _____

Circle Theorems in Geometry



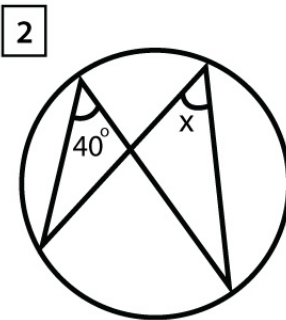
Angle at center is twice the angle at the circumference

$x = \underline{\hspace{2cm}}$



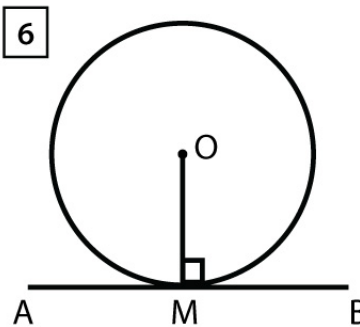
Perpendicular line drawn from center to the chord bisects the chord

$DB = \underline{\hspace{2cm}}$



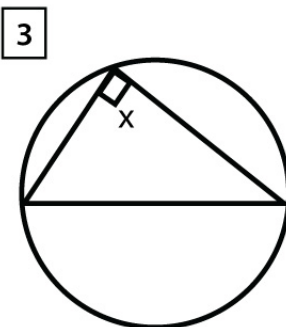
Angles in the same segment are equal.

$x = \underline{\hspace{2cm}}$



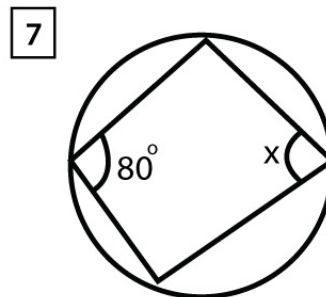
The angle between a tangent and a radius is 90°

$\angle OMA = \underline{\hspace{2cm}}$



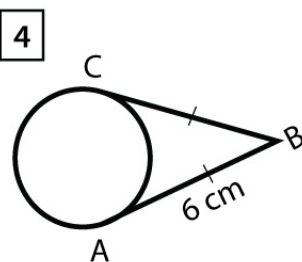
The angle in a semicircle is 90°

$x = \underline{\hspace{2cm}}$



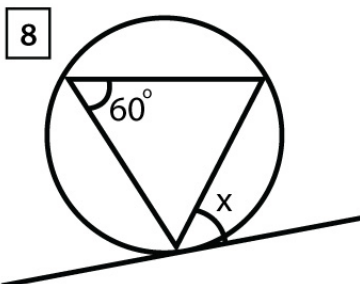
Opposite angles in a cyclic quadrilateral add up to 180°

$x = \underline{\hspace{2cm}}$



Tangents from a point outside a circle are of equal length

$CB = \underline{\hspace{2cm}}$



The angle between a chord and a tangent through one of the end points of the chord is equal to the angle in the alternate segment

$x = \underline{\hspace{2cm}}$

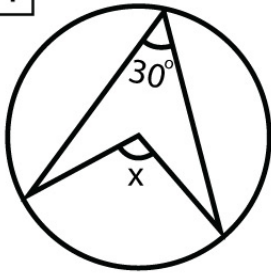
Name : _____

Score : _____ Date : _____

Circle Theorems in Geometry

Answers

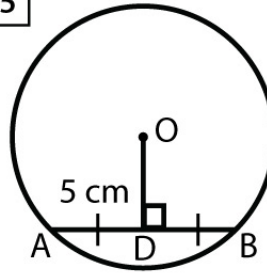
1



Angle at center is twice the angle at the circumference

$x = 60^\circ$

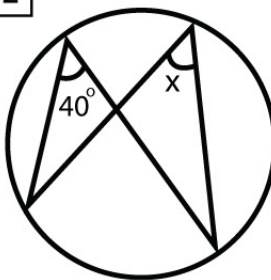
5



Perpendicular line drawn from center to the chord bisects the chord

$DB = 5 \text{ cm}$

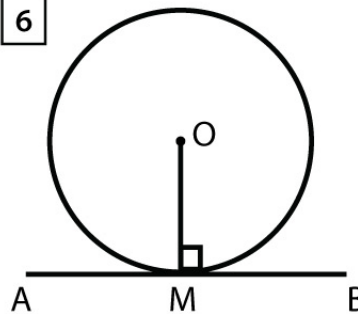
2



Angles in the same segment are equal.

$x = 40^\circ$

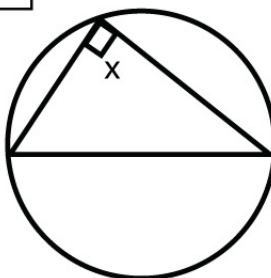
6



The angle between a tangent and a radius is 90°

$\angle OMA = 90^\circ$

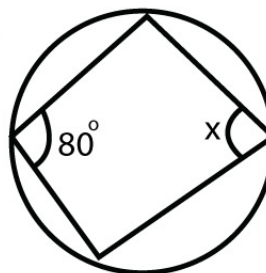
3



The angle in a semicircle is 90°

$x = 90^\circ$

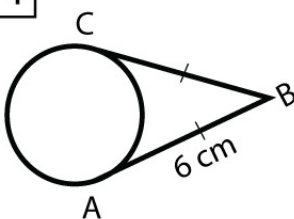
7



Opposite angles in a cyclic quadrilateral add up to 180°

$x = 100^\circ$

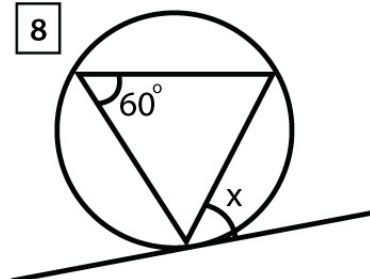
4



Tangents from a point outside a circle are of equal length

$CB = 6 \text{ cm}$

8



The angle between a chord and a tangent through one of the end points of the chord is equal to the angle in the alternate segment

$x = 60^\circ$