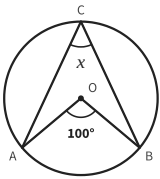


Circle Theorems: Angle at the Centre

1 centre = $2 \times$ circumference

Find x .

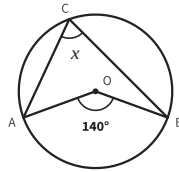


$$\boxed{100} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

2 Find x .

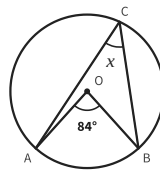


$$\boxed{140} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

3 Find x .

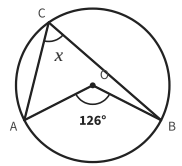


$$\boxed{84} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

4 Find x .



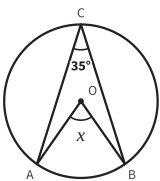
$$\boxed{126} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

5 *Notice the change!*

Find x .

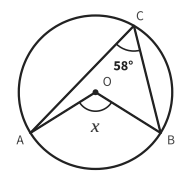


$$\boxed{} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

6 Find x .

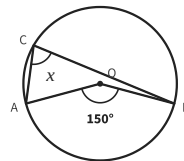


$$\boxed{} = 2 \times \boxed{}$$

angle at centre angle at circumference

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

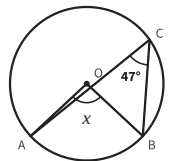
7 Find x .



$$\boxed{} = 2 \times \boxed{}$$

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

8 Find x .



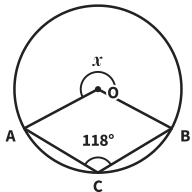
$$\boxed{} = 2 \times \boxed{}$$

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

Circle Theorems: Angle at the Centre *further practice*

9

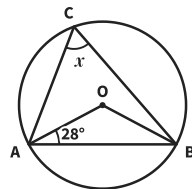
O is the centre of the circle.
Find the reflex angle AOB, marked x .



Answer $\underline{\hspace{2cm}}$

10

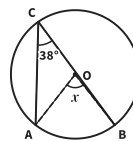
O is the centre of the circle.
Find angle ACB, marked x .



Answer $\underline{\hspace{2cm}}$

11

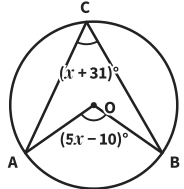
A camera at C on the edge of a round courtyard just sees two doors, A and B, also on the edge: its view is 38° wide. A camera at the centre O must also just see both doors. How wide must its view be?



Answer $\underline{\hspace{2cm}}$

12

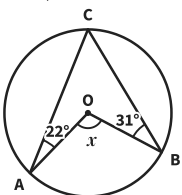
O is the centre of the circle.
Find the value of x .



Answer $\underline{\hspace{2cm}}$

13

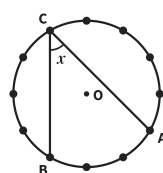
O is the centre of the circle.
Find angle AOB, marked x .



Answer $\underline{\hspace{2cm}}$

14

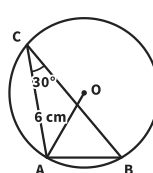
A big wheel has 12 pods equally spaced round its rim. Pods A and B are 3 gaps apart. Find angle ACB.



Answer $\underline{\hspace{2cm}}$

15

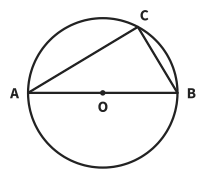
O is the centre and the radius is 6 cm. Angle ACB = 30° . Find the length of the chord AB. Explain your method.



Answer $\underline{\hspace{2cm}}$

16

AB is a diameter. Use the angle at the centre theorem to explain why angle ACB is always 90° .



So $\underline{\hspace{2cm}}$