

Show all working – Calculator allowed unless stated.

 The pendulum of a clock swings along an arc of a circle, centre O.
 The pendulum swings through an angle of 62°, travelling from A to B.
 The length of the arc AB is 32.3 cm.
 Calculate the length of the pendulum.





The diagram below shows part of a circle, centre O. The radius of the circle is 4.6 centimetres. Major arc AB has length 23.2 centimetres. Calculate the size of the reflex angle AOB.

3. The diagram below shows a sector of a circle, centre C.

The radius of the circle is 8.2 metres.

Calculate the area of the major sector ACB.



(3)

4. In the diagram ABC is a sector of a circle, centre C
The area of the sector, ABC, is 3250 square centimetres.
Calculate the size of angle ACB to the nearest degree.

No Calculator should be used for the following 2 questions.



(3)

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The diagram below shows a sector of a circle, centre C. The radius of the circle is 40 centimetres. The angle ACB is 225° Calculate the length of the major arc AB. Take $\pi = 3.14$ (3)

6. The diagram shows a sector of a circle, centre C. The radius of the circle is 30 centimetres and angle ACB is 40°. Calculate the area of the sector. Take $\pi = 3.14$. (3)

Total Marks: 20

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