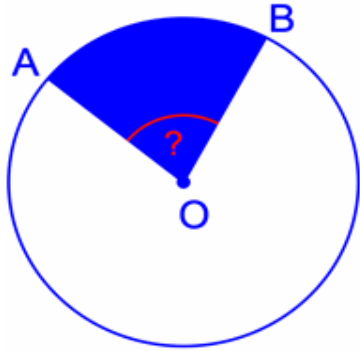


Extended Worksheet Review 27/2/2018
Tiffany Dickie

Question 1

Determine the $m\angle AOB$ in the circle below.



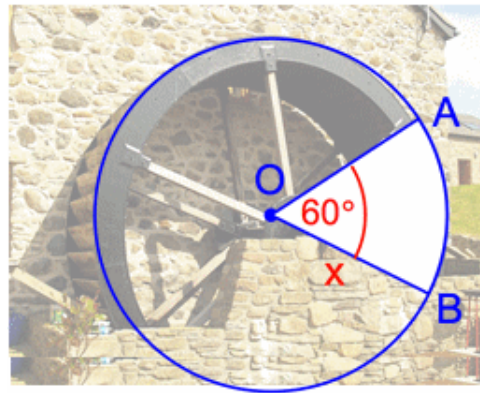
$$A_{\text{Circle}} = 6048.24 \text{ dm}^2$$

$$A_{\text{AOB}} = 1260.05 \text{ dm}^2$$

Question 2

Charlestown is an old mining town and keeps one of its original watermills on display in the river, as shown in the diagram below. The circular area between two of the spokes in the watermill is 5.36 m^2 .

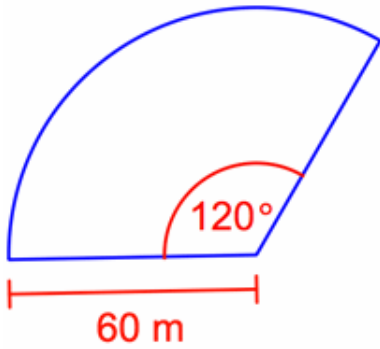
Determine the length (x) of one of the spokes on the watermill. Round the final answer to the nearest tenth.



$$A_{\text{AOB}} = 5.36 \text{ m}^2$$

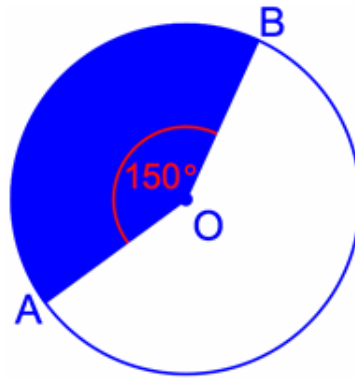
Question 3

Determine the **area** of the shape below. Round the answer to the nearest tenth.



Question 4

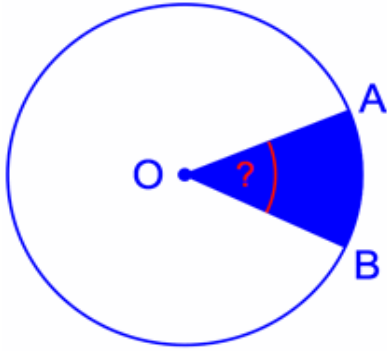
Calculate the **area of the circle** shown below. Round the answer to the nearest tenth.



$$A_{AOB} = 473.5\text{ dm}^2$$

Question 5

Determine the $m\angle AOB$ in the circle below.

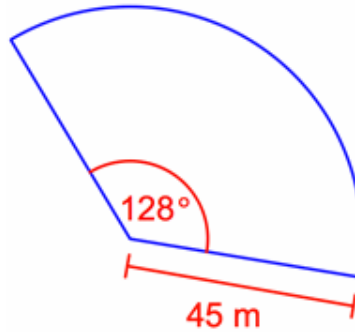


$$A_{\text{Circle}} = 648.72 \text{ dm}^2$$

$$A_{\text{AOB}} = 81.09 \text{ dm}^2$$

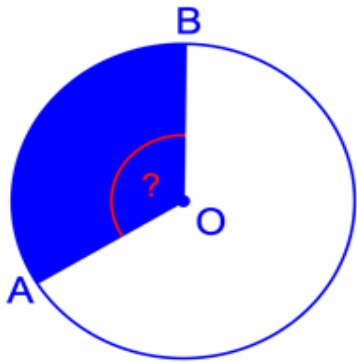
Question 6

Determine the **area** of the shape below. Round the answer to the nearest tenth.



Question 7

Determine the $m\angle AOB$ in the circle below.



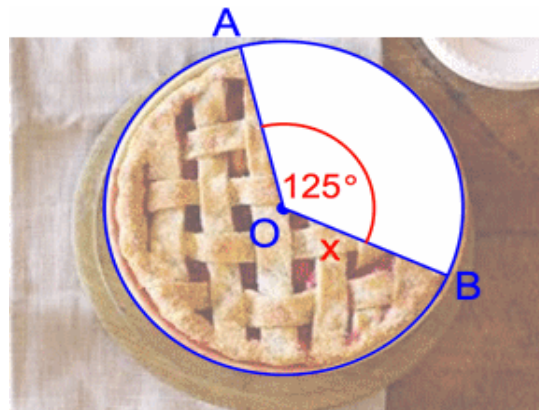
$$A_{\text{Circle}} = 3684.72 \text{ dm}^2$$

$$A_{\text{AOB}} = 1228.24 \text{ dm}^2$$

Question 8

Miriam baked a large pie for a family picnic. She sliced into the centre of the pie and removed several slices for her cousins, as shown in the diagram below.

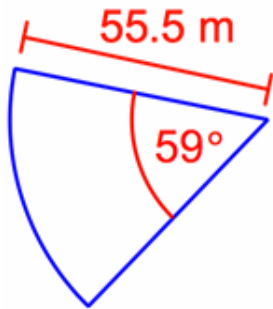
Determine the length (x) of the cut Miriam made from the centre of the pie to the edge, given that she removed a circular area of 216.9 cm^2 of pie from the pie plate.



$$A_{\text{AOB}} = 216.9 \text{ cm}^2$$

Question 9

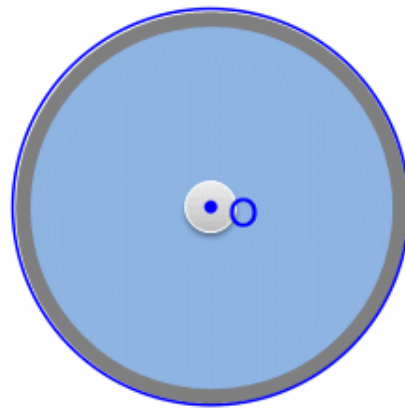
Determine the **area** of the shape below. Round the answer to the nearest tenth.



Question 11

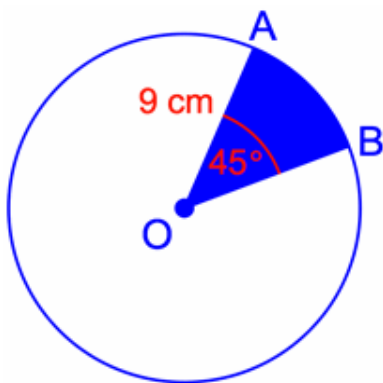
In Jefferson Park there is a large fountain that shoots water from the centre of a circular base, as shown in the diagram below. There is a small wall that runs around the fountain base, measuring 21.58 m in circumference.

Determine the area of the base of the fountain. Round the answer to the nearest tenth.



Question 10

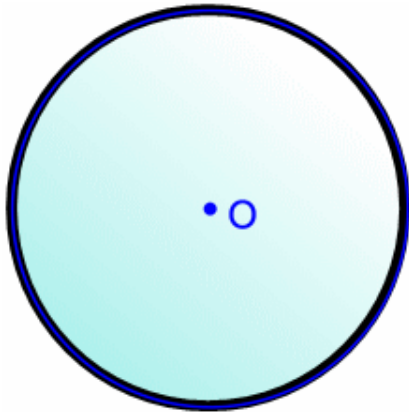
Determine the **area of sector AOB** in the circle below. Round the answer to the nearest tenth.



Question 12

Sean's camera has a lens with an area of 39.95 cm^2 . The lens is held in place by a thin piece of plastic, as shown in the diagram below.

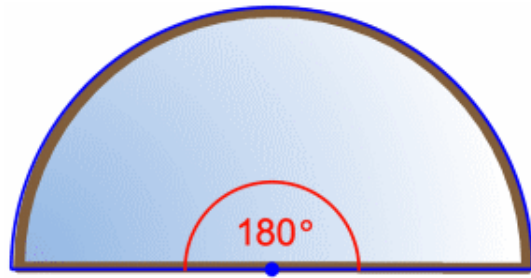
Determine the total length of the plastic trim. Round the answer to the nearest tenth.



Question 13

Jocelyn has a window above her front door that has a thin wooden frame, as shown in the diagram below. The area of the window is 90 dm^2 .

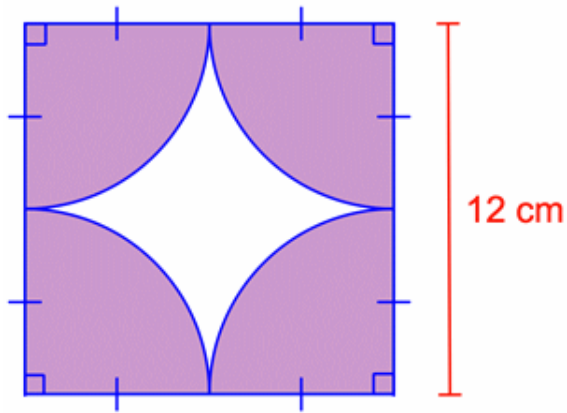
Determine the total length of wood Jocelyn would need to replace the window frame. Round the answer to the nearest tenth.



Question 14

George is choosing new carpet for his living room and borrows several sample pieces from the carpet store to help him decide. One of the samples is shown in the diagram below.

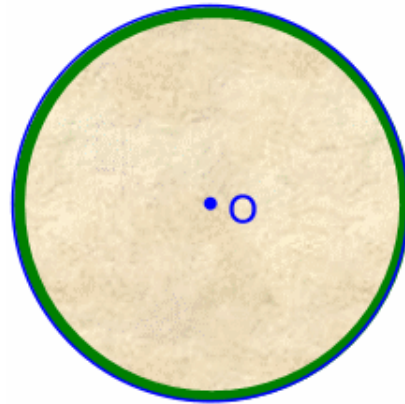
Determine the area of the sample carpet that is white. Round the answer to the nearest tenth.



Question 15

Farida found an old hat box and decided to decorate it and use it as a storage bin. The bottom of the box has an area of 357.9 cm^2 , as shown in the diagram below.

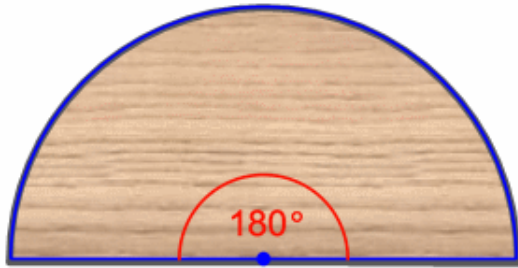
Farida wants to glue a piece of ribbon so that it wraps around the base of the box exactly once. What length of ribbon will she need? Round the answer to the nearest tenth.



Question 16

Robin is building a new front porch for her house, shown in the diagram below. The porch floor has an area of 85 dm^2 and is made of wood. Robin wants to attach plastic fencing around the bottom of the floor to keep animals out.

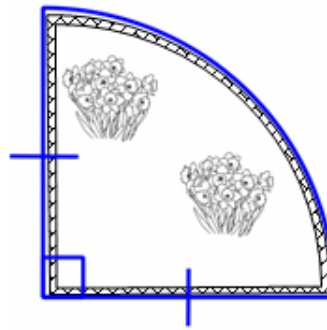
Determine the total length of plastic fencing that Robin will need to wrap around the entire porch exactly once. Round the answer to the nearest tenth.



Question 17

Janine has a garden in the corner of her yard and wishes to line it with bricks, as shown in the diagram below. The area of her garden is 103.9 dm^2 .

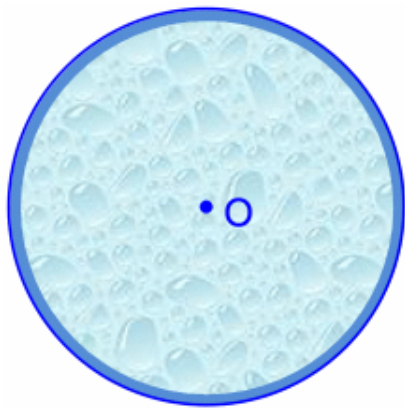
What is the total length of the bricks Janine will need to wrap around her entire garden exactly once? Round the answer to the nearest tenth.



Question 18

Ryder has a circular pool in his backyard, as shown in the diagram below. The pool takes up an area of 101.84 m^2 on his lawn.

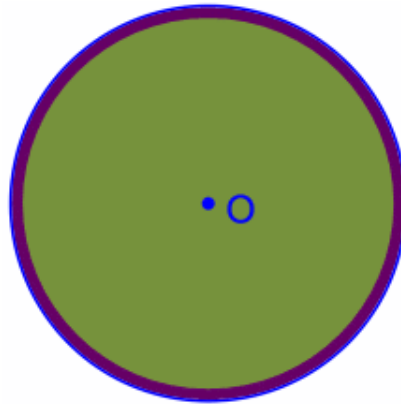
If Ryder wishes to attach a line of tiles around the top of the pool's edge, what is the total length of the tiles he will need? Round the answer to the nearest tenth.



Question 19

Jaida has coasters in her living room that are green with a purple border, as shown in the diagram below. The purple border has a circumference of 25.79 cm .

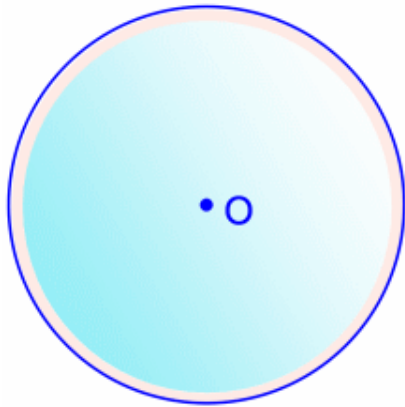
Determine the area of one of the coasters. Round the answer to the nearest tenth.



Question 20

Christina's boat has a circular window with an area of 225.09 cm^2 , as shown in the diagram below. A thin line of caulking surrounds the glass, helping to seal out moisture.

Determine the length of the line of caulking. Round the answer to the nearest tenth.

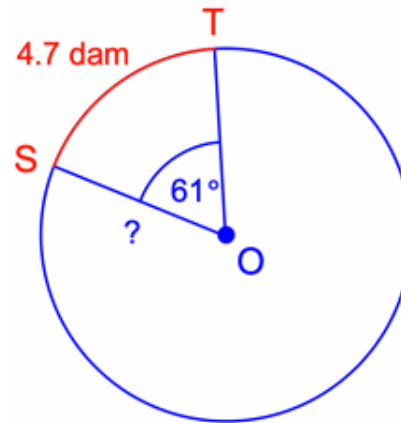


Question 21

Determine the **radius** of the circle below given that

$$m\widehat{ST} = 4.7 \text{ dam}.$$

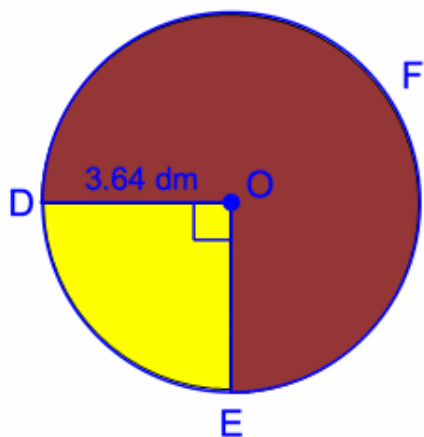
If necessary, round the answer to the **nearest hundredth**.



Question 22

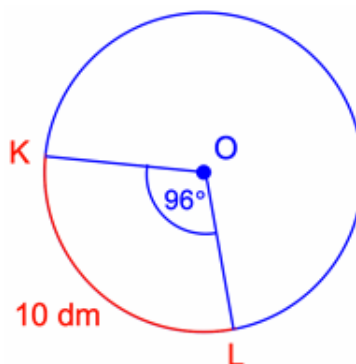
A circular stained glass window is made up mostly of red wine coloured glass, with a section of yellow glass in the bottom left corner, as shown in the diagram below. The yellow section begins at the centre of the window, 3.64 dm from the outer edge.

Determine the measurement of the arc of the red wine coloured glass, $m\widehat{EFD}$. Round the answer to the **nearest hundredth**.



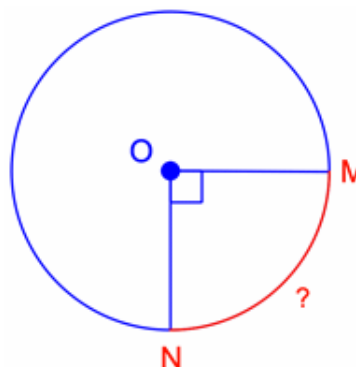
Question 23

Determine the **circumference** of the circle below given that $m\widehat{KL} = 10$ dm.



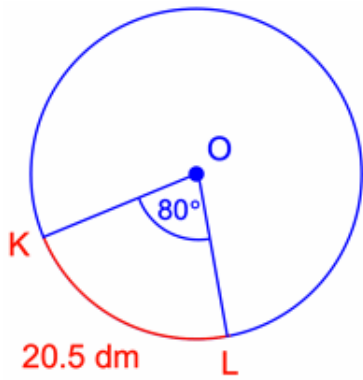
Question 24

Determine $m\widehat{MN}$ in the circle below, given that the circumference of the circle is 56 cm.



Question 25

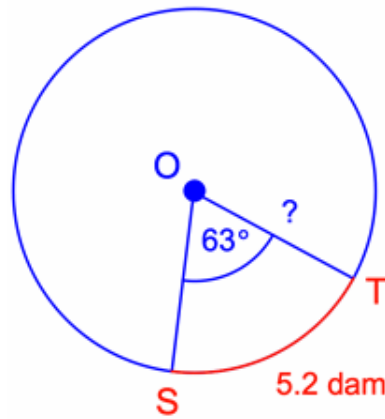
Determine the **circumference** of the circle below given that $m\widehat{KL} = 20.5$ dm.



Question 26

Determine the **radius** of the circle below, given that $m\widehat{ST} = 5.2$ dam.

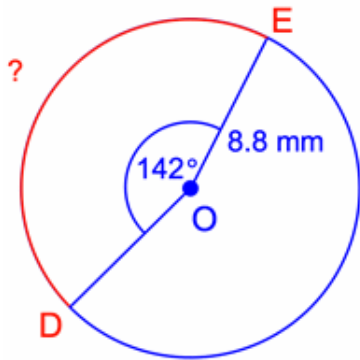
If necessary, round the answer to the **nearest hundredth**.



Question 27

Determine $m\widehat{DE}$ for the circle below.

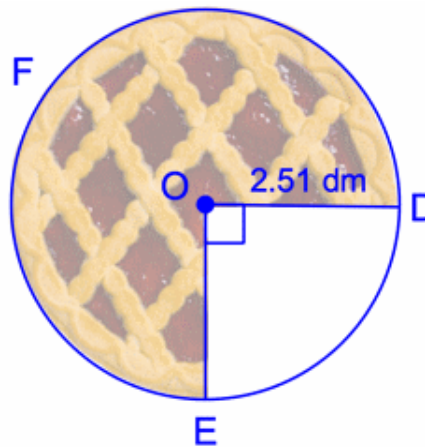
If necessary, round the answer to the **nearest hundredth**.



Question 28

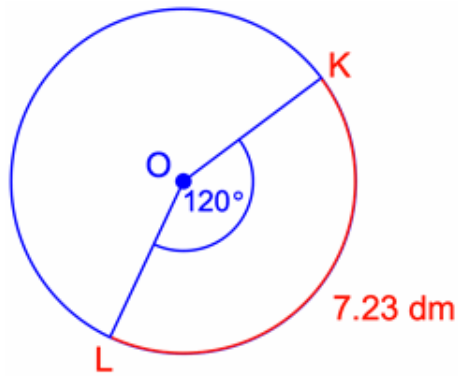
Carmen cuts to the centre of a pie and removes a large piece, as shown in the diagram below. The length of the cut from the edge of the pie to the centre is 2.51 dm .

Determine the measurement of the arc of the remaining pie, $m\widehat{EFD}$. Round the answer to the **nearest hundredth**.



Question 29

Determine the **circumference** of the circle below given that $m\widehat{KL} = 7.23$ dm.



Question 30

Vivian is passing out slices of birthday cake at a party. She cuts directly to the centre and removes one slice, as shown in the diagram below.

The arc of the remaining cake ($m\widehat{EFD}$) measures 42 cm. Determine the measurement of \widehat{DE} , the arc of the slice of cake that was removed.

Round the answer to the **nearest hundredth**.

