

**WEEK: 19**

**Week Beginning: (27/07/20)**

**Subject: MATHS**

**Year: 6**

### Lesson Objective:

- Introduction to area of a circle and circumference
- Understand radius and diameter of a circle
- Be able to use formulas to work out circumference and area of circle

### Class Worksheets

- Circumference
- Area of circle

### Homework

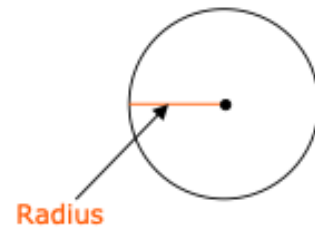
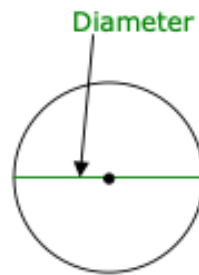
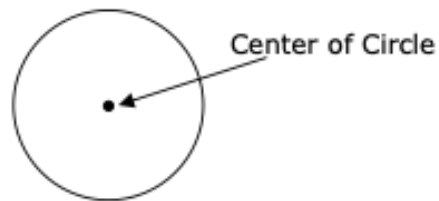
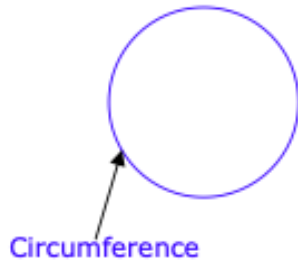
- Continue to work on these two topics

### Additional Notes

- All lesson worksheets and **homework for next week (due Week 20)** worksheets can be found below
- Week 18 homework will be marked in lesson hence make sure it is fully complete
- Have a **CALCULATOR** ready to be used in lesson

**Please print 2 a page or open this document during the lesson to save paper!**

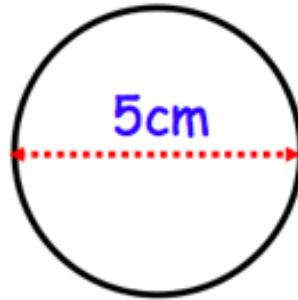
Vocabulary:



The formula for finding the Circumference of a circle is:  $C = \pi d$  where  $d$  represents the **diameter** of the circle.

The formula may also be written:  $C = 2\pi r$  where  $r$  is the **radius** of the circle.

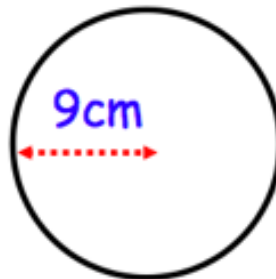
1. Shown below is a circle with diameter 5cm.



Calculate the circumference of the circle.  
Give your answer to 1 decimal place.

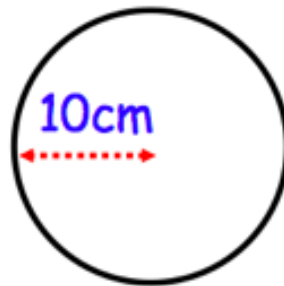
.....cm  
(2)

2. Shown below is a circle with radius 9cm.



Work out the circumference of the circle.  
Give your answer to 1 decimal place.

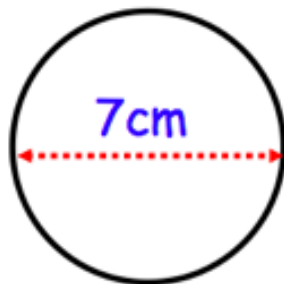
.....cm  
(2)



Work out the circumference of the circle.  
Give your answer in terms of  $\pi$ .

.....cm  
(2)

4. Shown below is a circle with diameter 7cm.

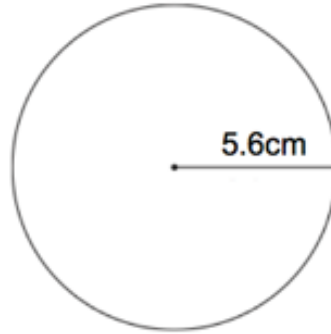


Work out the circumference of the circle.  
Give your answer in terms of  $\pi$ .

.....cm  
(2)

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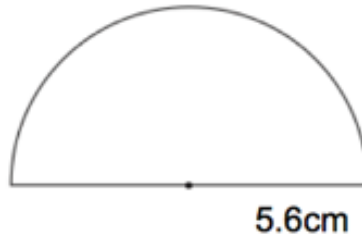
10. A circle has radius 5.6cm.



(a) Work out the circumference of the circle.

.....cm  
(2)

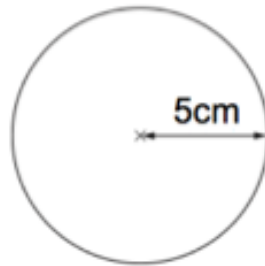
A semicircle has radius 5.6cm



(b) Work out the perimeter of the semicircle.

.....cm  
(2)

1. Shown is a circle with radius 5cm.



Work out the area of the circle.

State the units for your answer.

Give your answer to 2 decimal place.

.....  
(3)

2. A circle has radius 3cm.

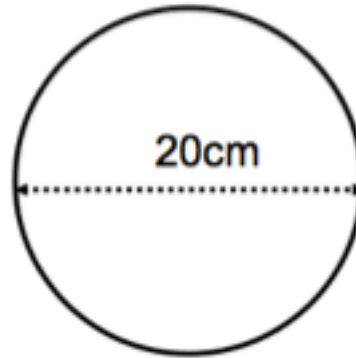


Work out the area of the circle.

Give your answer in terms of  $\pi$

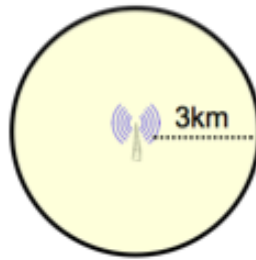
.....cm<sup>2</sup>  
(2)

3. A circle has a diameter of 20cm.



Work out the area of the circle.  
Use  $\pi = 3.14$

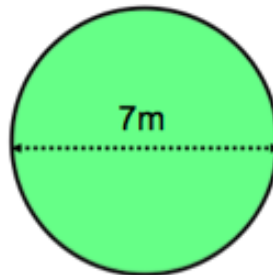
5. A mobile phone mast has a range of 3km.



Calculate the area of the shaded region.  
Give your answer to 2 decimal places.

.....km<sup>2</sup>  
(2)

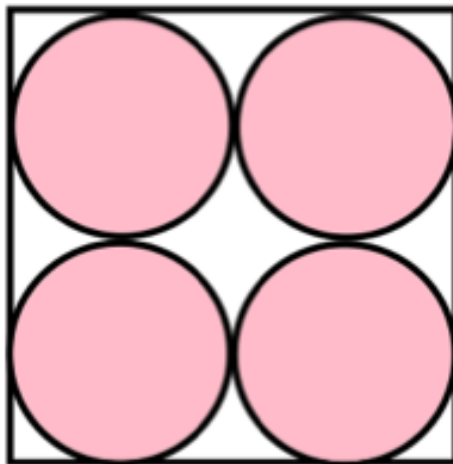
6. A circular flower bed has diameter 7 metres.



Work out the area of the flower bed.  
Give your answer correct to 1 decimal place.



12. A logo is designed that has four pink circles within a white square.



16cm

The square has side length 16cm.

Find the area of the logo that is white.

Homework Questions:

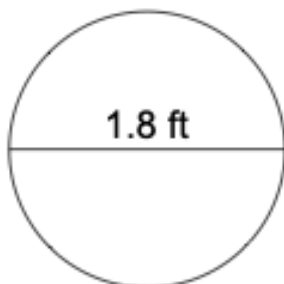
# Circumference of a circle

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## Grade 6 Geometry Worksheet

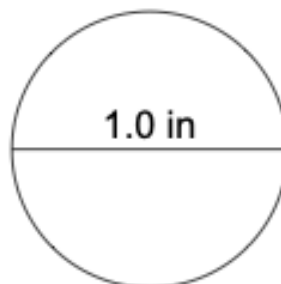
Calculate the circumference of each circle.

1.



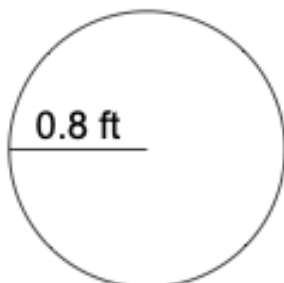
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2.



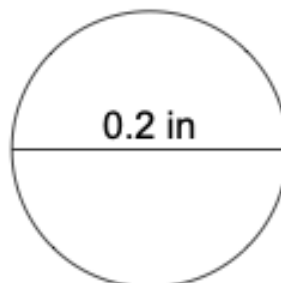
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3.



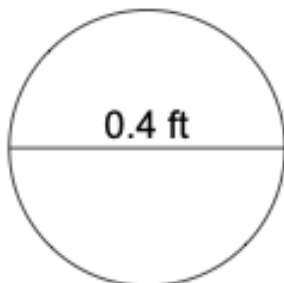
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4.



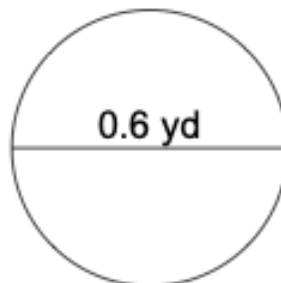
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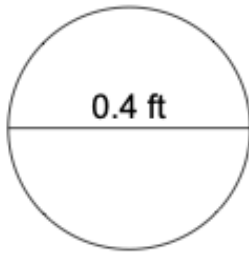
# Circumference of a circle

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## Grade 6 Geometry Worksheet

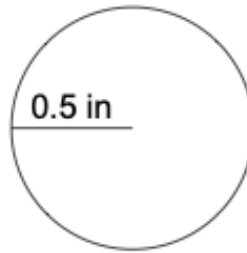
Calculate the circumference of each circle.

1.



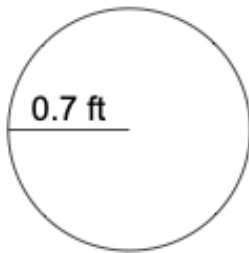
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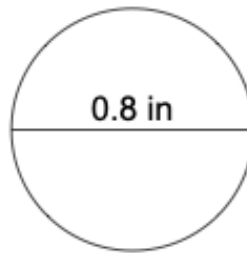
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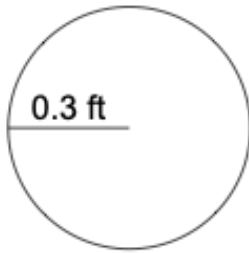
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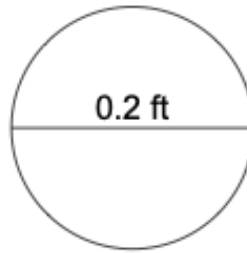
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6.



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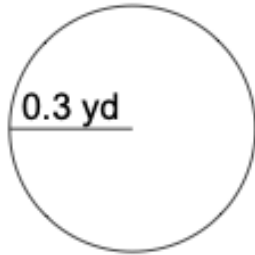
# Area of a circle

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## Grade 6 Geometry Worksheet

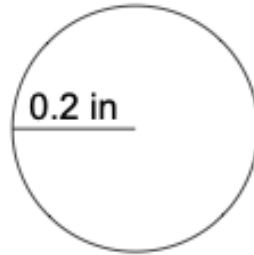
Calculate the area of each circle.

1.



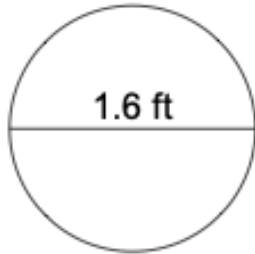
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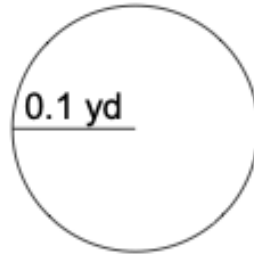
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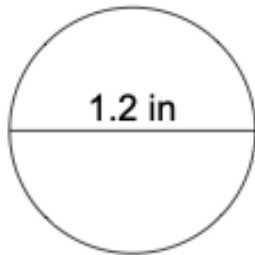
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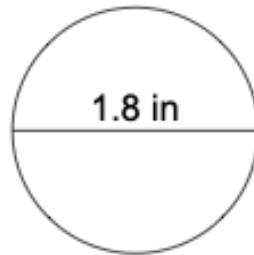
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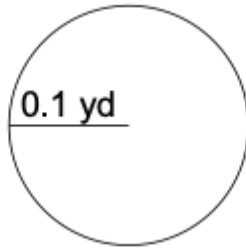
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# Area of a circle

## Grade 6 Geometry Worksheet

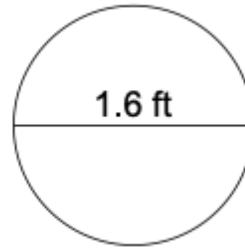
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1.



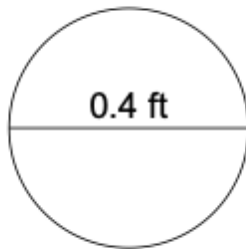
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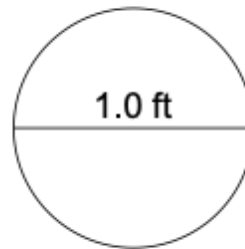
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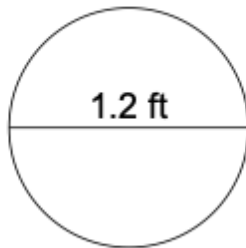
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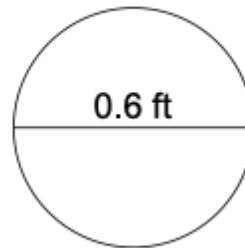
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6.



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