

**MOTHERCARE PREPARATORY SCHOOLS**  
**HOLIDAY WORK - WEEK FOUR**  
**P.5 MATHEMATICS**

Name: \_\_\_\_\_ Stream: \_\_\_\_\_

**1. Naming parts of a circle.**


- diameter
- radius
- sector
- chord
- circumference

**2. Other parts of a circle.**

- circle 

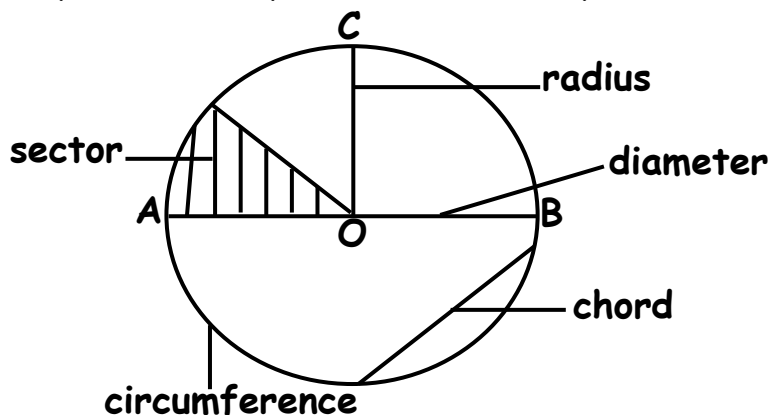
- quadrant 

- semicircle 

- sector 

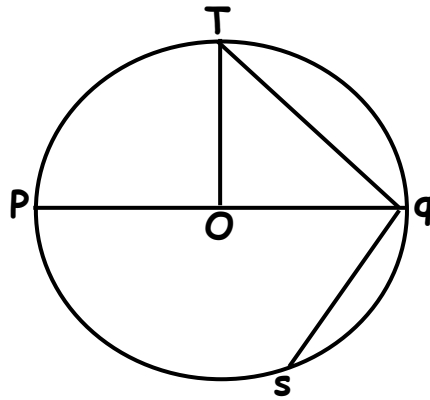
**Note**

- a) Circumference is the distance around the circle.
- b) A radius is any line segment from the centre to the circumference.
- c) A diameter is a line segment passing through the centre of a circle from circumference to circumference.



**Activity**

1. Use the Diagram below to answer the questions that follow.



a) Name the following lines on the circle above.

PQ \_\_\_\_\_

QS \_\_\_\_\_

OQ \_\_\_\_\_

TQ \_\_\_\_\_

OP \_\_\_\_\_

b) What is the size of line OQ if  $pq = 10\text{cm}$ ?

2. Draw the following parts of a circle.

quadrant	semicircle
sector	circle

### Finding diameter when radius is given.

Diameter is made up of 2 radii

$$\text{Diameter} = r + r$$

$$\text{Diameter} = 2r$$

1. Find the diameter of a circle whose radius is 4cm.

$$\begin{aligned}\text{Diameter} &= 2r \\ &= 2 \times 4\text{cm} \\ &= \underline{\underline{8\text{cm}}}\end{aligned}$$

### Finding radius when diameter is given.

2 radii make up a diameter.

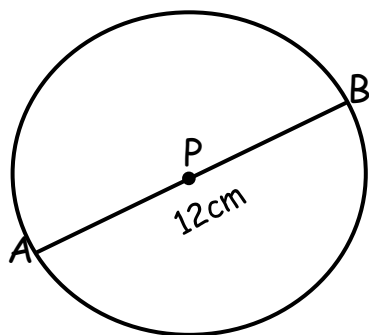
$$\text{Radius} = \text{Diameter} \div 2$$

$$\text{Radius} = \frac{\text{Diameter}}{2}$$

2. The diameter of a circle is 10cm. Find the radius of the circle.

$$\begin{aligned}\text{Radius} &= \frac{\text{Diameter}}{2} \\ &= \frac{10\text{cm}}{2} \\ &= \underline{\underline{5\text{cm}}}\end{aligned}$$

3. Line AB = 12cm. If AB passes through the centre. Find the length of line PB.



AB is diameter

PB is radius

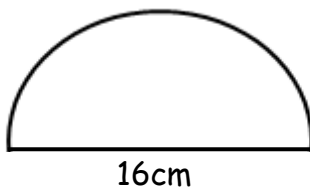
$$\begin{aligned}\text{PB} &= \frac{\text{Diameter}}{2} \\ &= \frac{12\text{cm}}{2} \\ &= \underline{\underline{6\text{cm}}}\end{aligned}$$



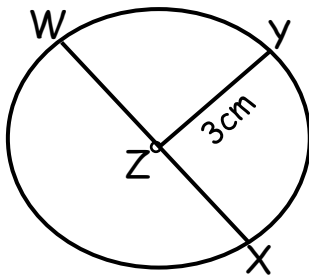
5. What is the radius of a circle whose diameter is 20cm?

6. Calculate the radius of a circle whose diameter is 14cm?

7. Below is a semi-circle. Calculate the radius of a circle from the semi-circle was drawn.



8. Study the circle below and answer the questions.



Find the length of the lines below.

a) ZX

b) WZ

c) WX

**-End-**