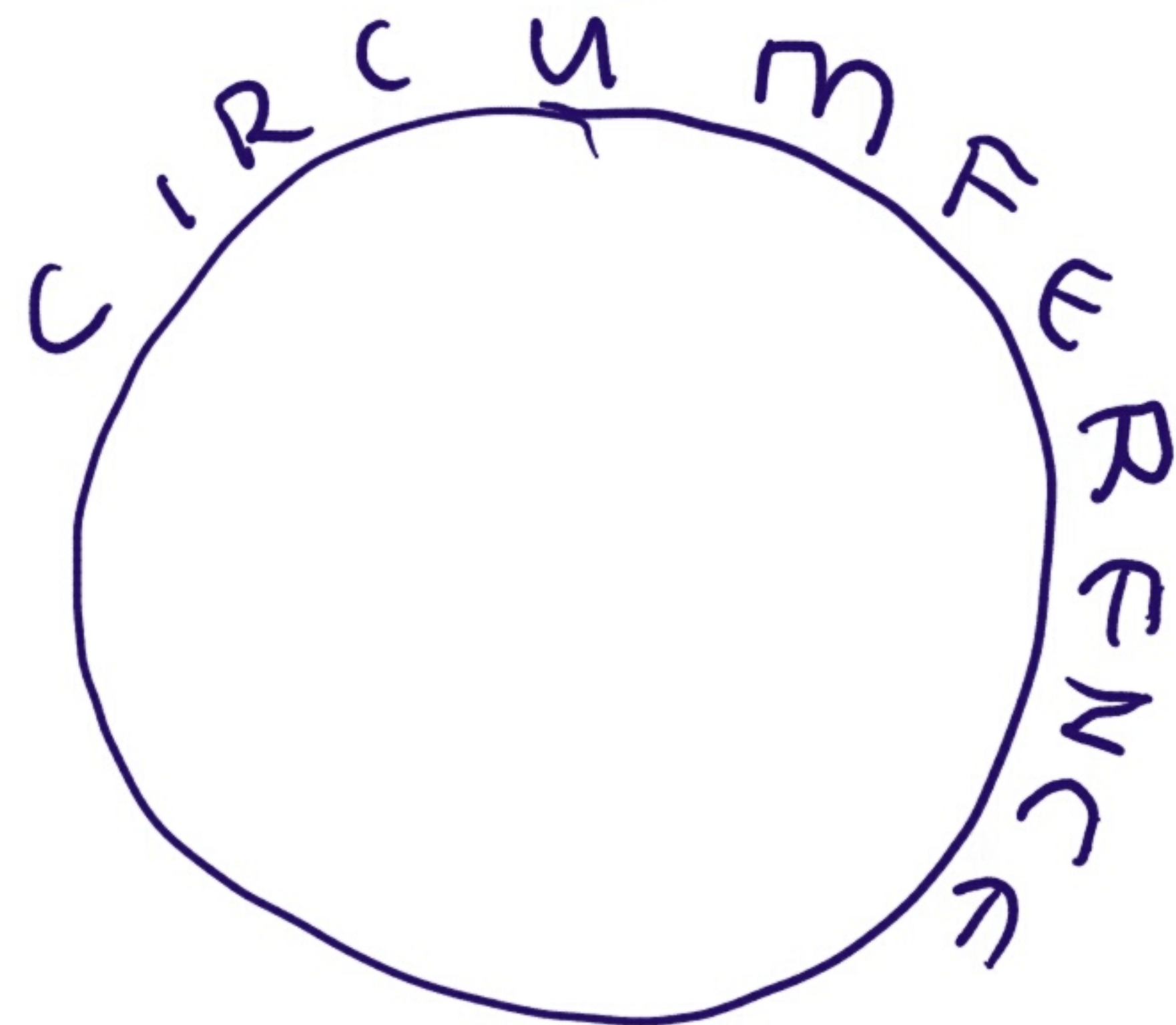
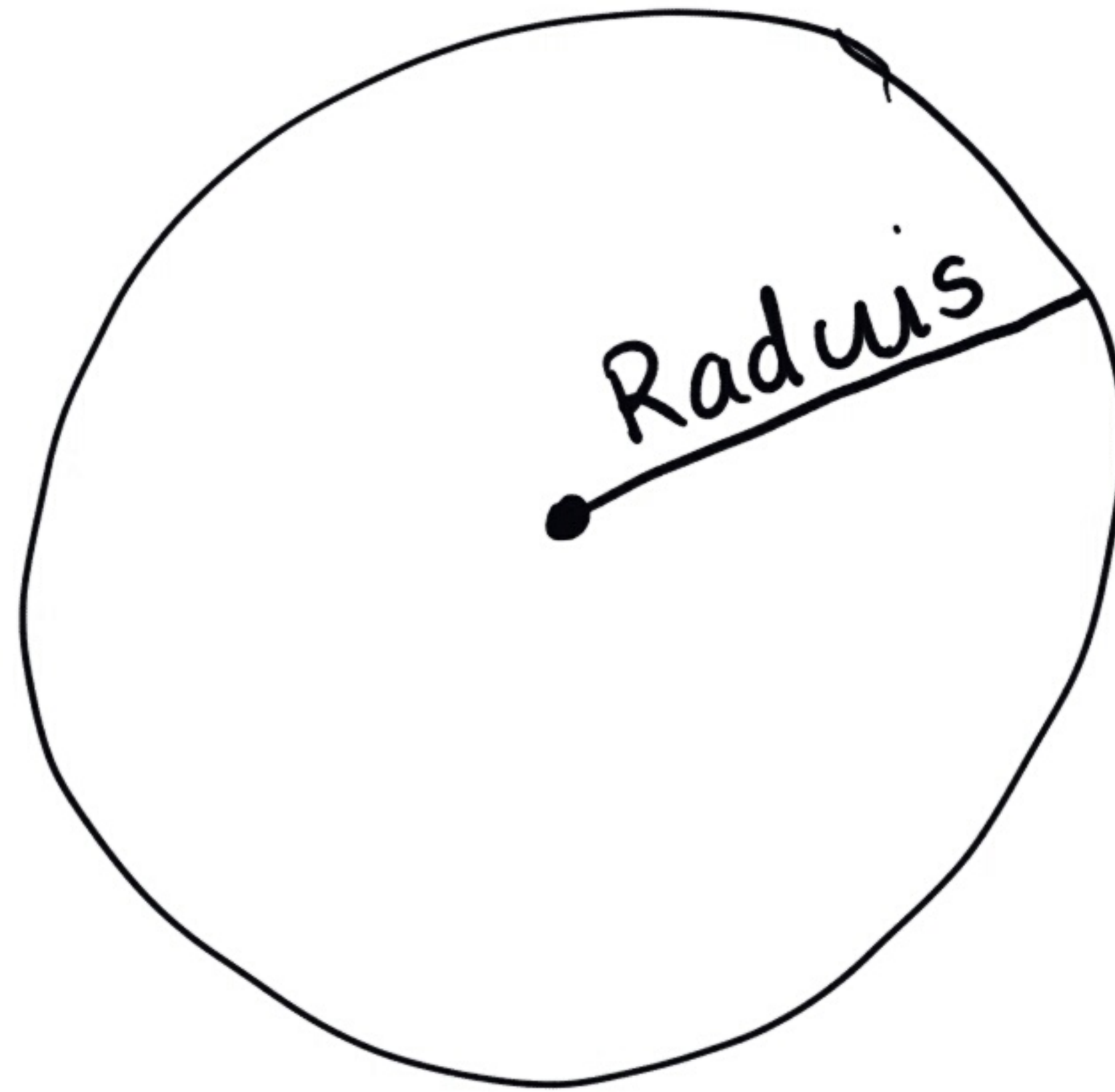
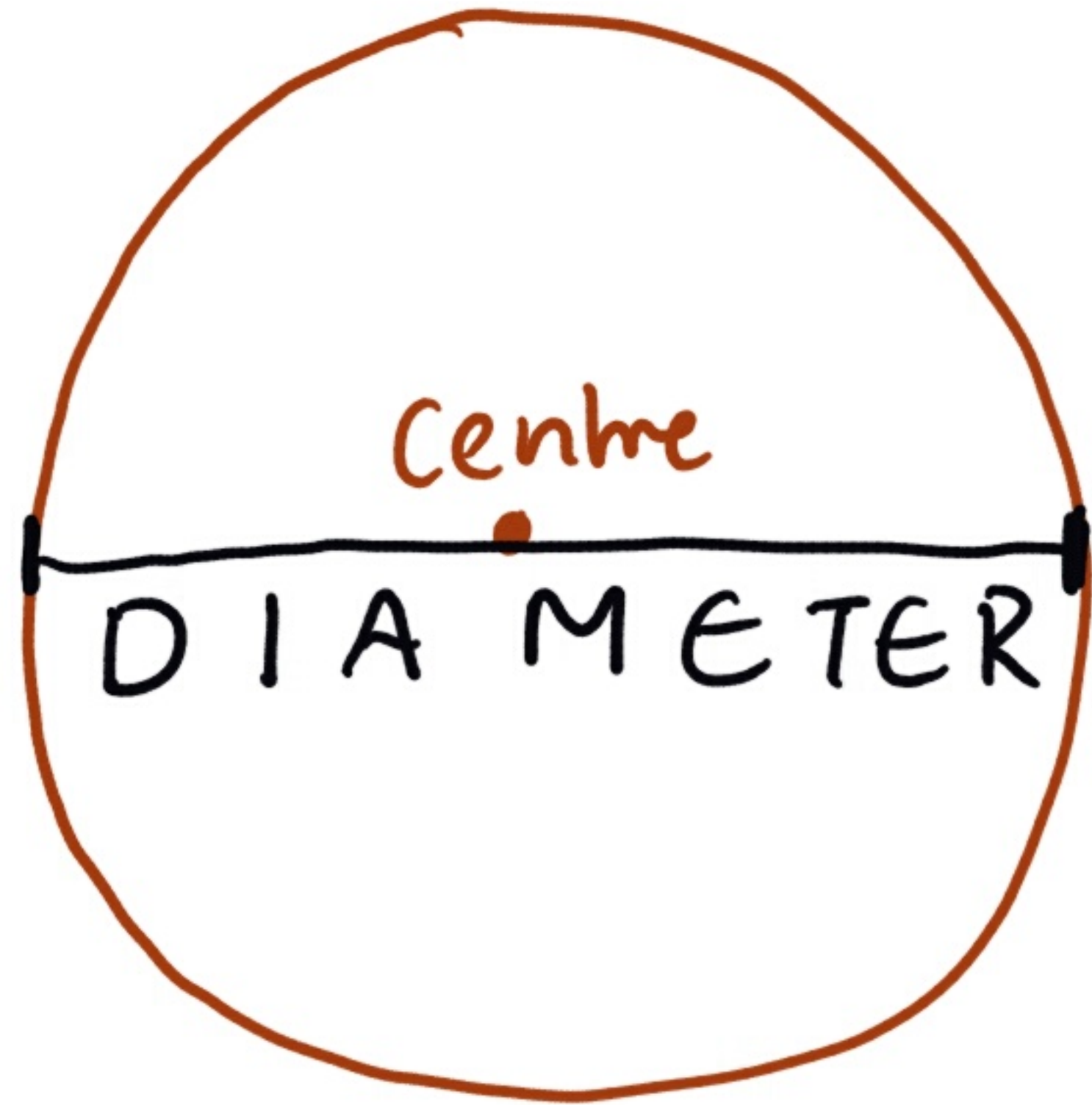


# CIRCLES



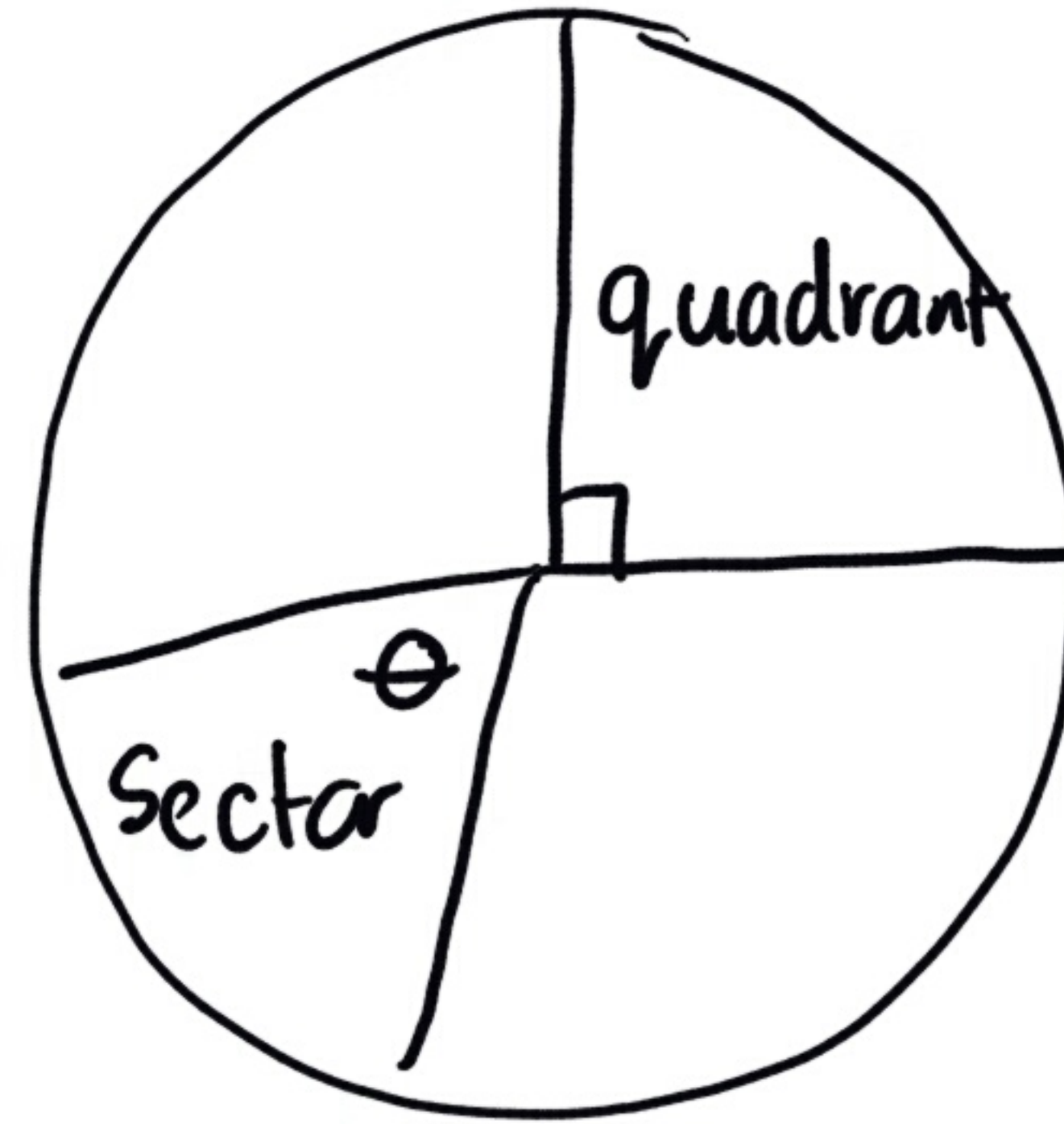
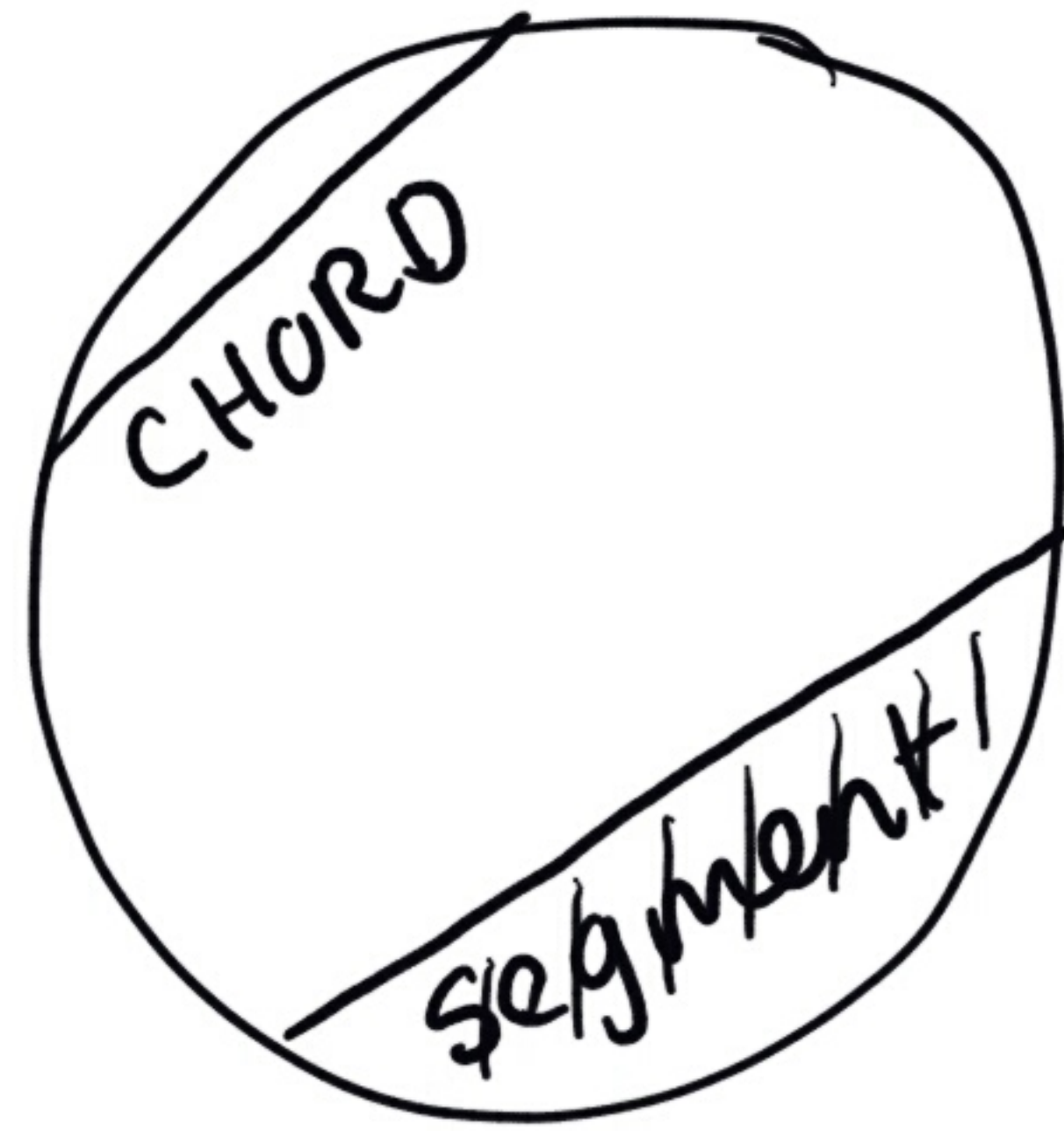
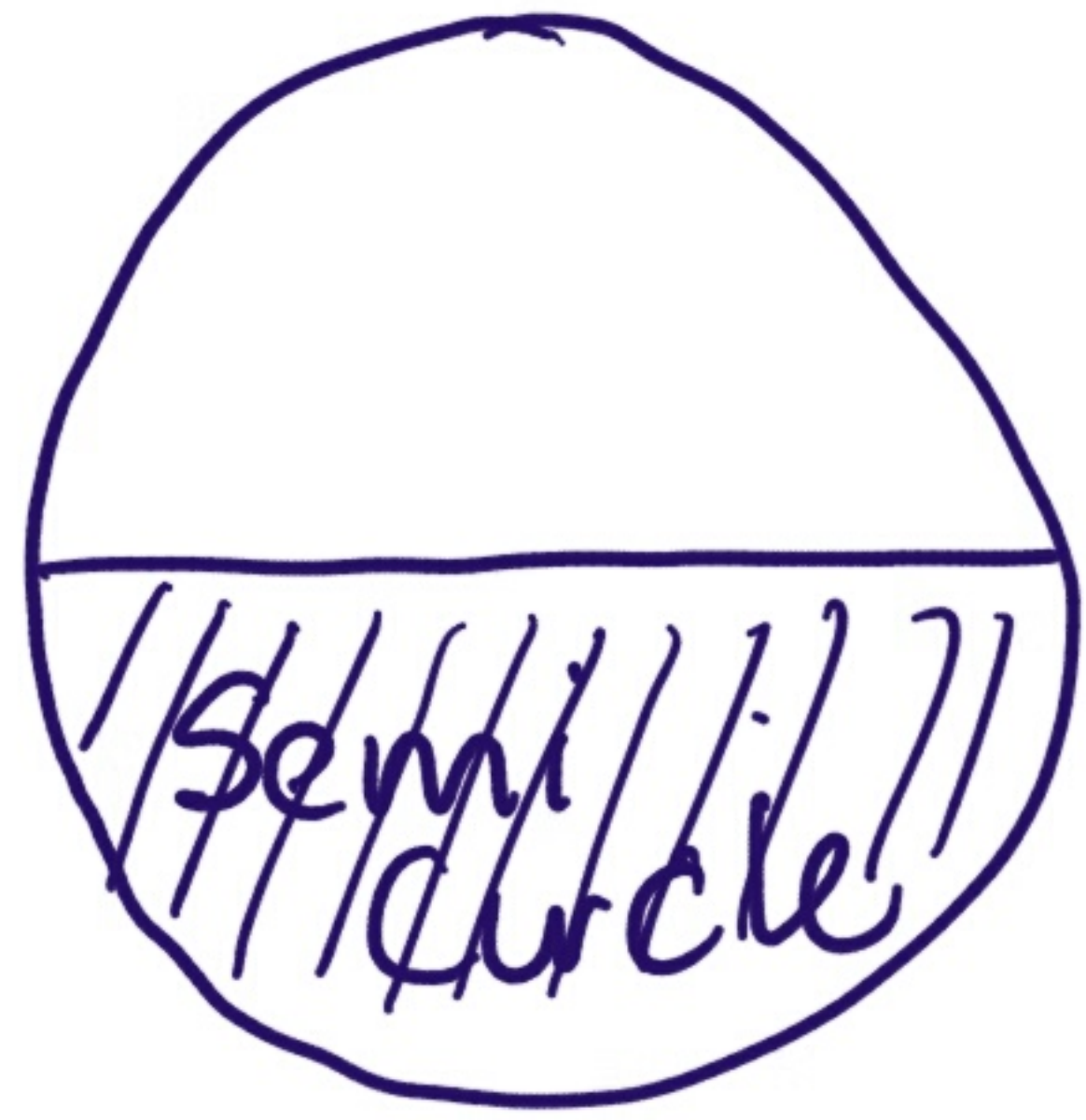
→ outside of the circle the perimeter

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

Pi ( $\pi$ ) has a special relationship with the circles circumference and diameter.

$$\pi = \frac{\text{Circumference}}{\text{Diameter}}$$

$$\pi = 3.14 \text{ OR } \frac{22}{7}$$



quadrant  
has  $90^\circ$   
angle

Sector  $\theta$   
 $\theta$  tetra.  
Greek for  
angle.

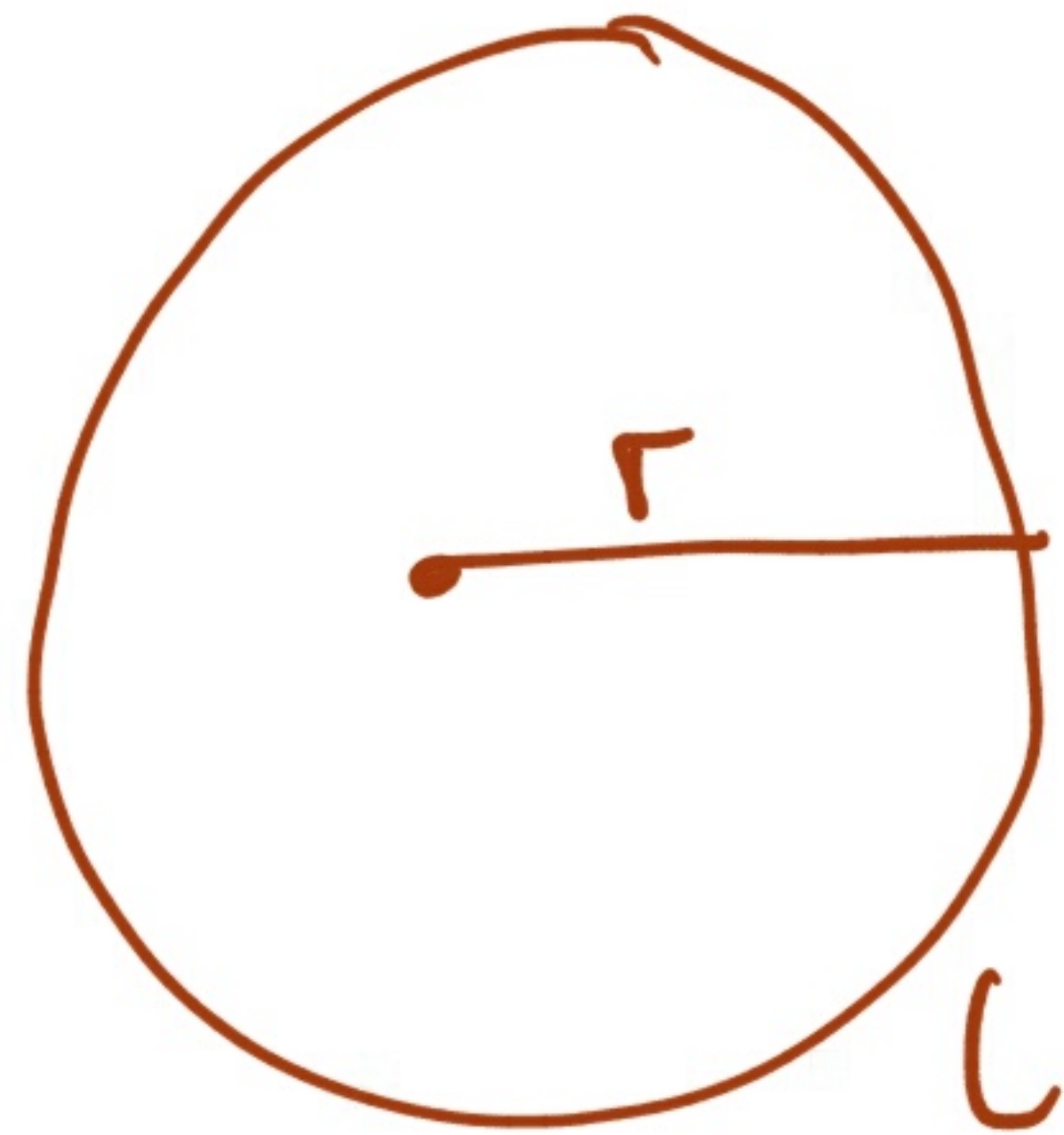
H | W Pg 95

Q 1

To find the circumference of a circle

Pg 8 Log tables.

$C$  = length  
circumference.



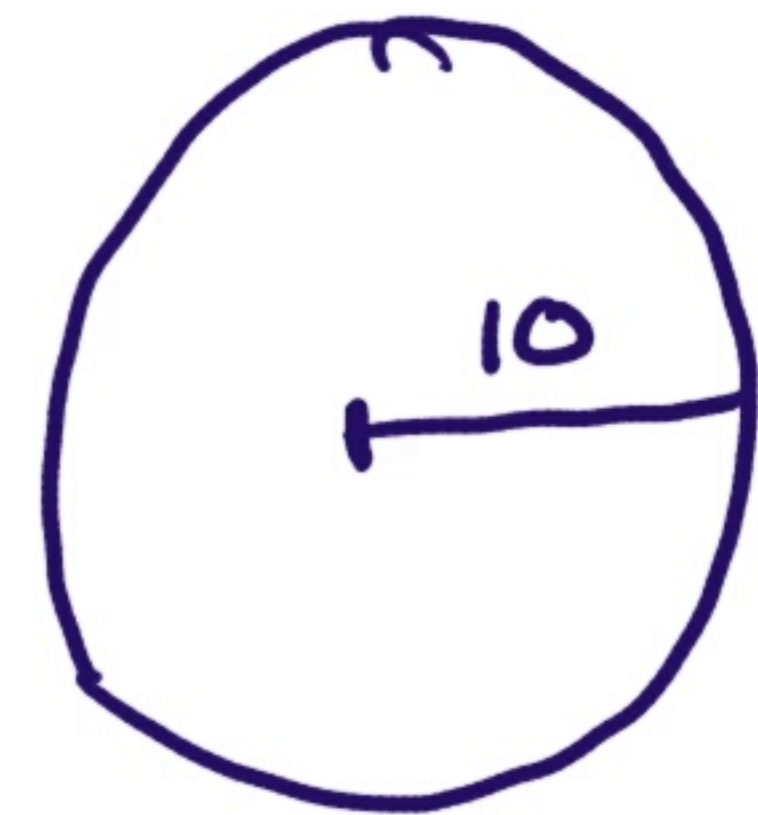
\*  $C = 2\pi r$  formula.

$$\pi = \frac{\text{Circumference}}{\text{Diameter}}$$

Calculator  
[SHIFT] [ $\times 10^x$ ] =  $\pi$

3.14 or  $\frac{22}{7}$  or  $\pi$   
(in terms of  $\pi$ )

Eg 1 Find the  
circumference



Radius = 2

$$l = 2\pi r \quad \pi = 3.14$$

$$l = 2 \times (3.14) \times (10)$$

Calculator

$$l = 62.8$$

## Area of a circle

$$A = \pi r^2$$

A = Area

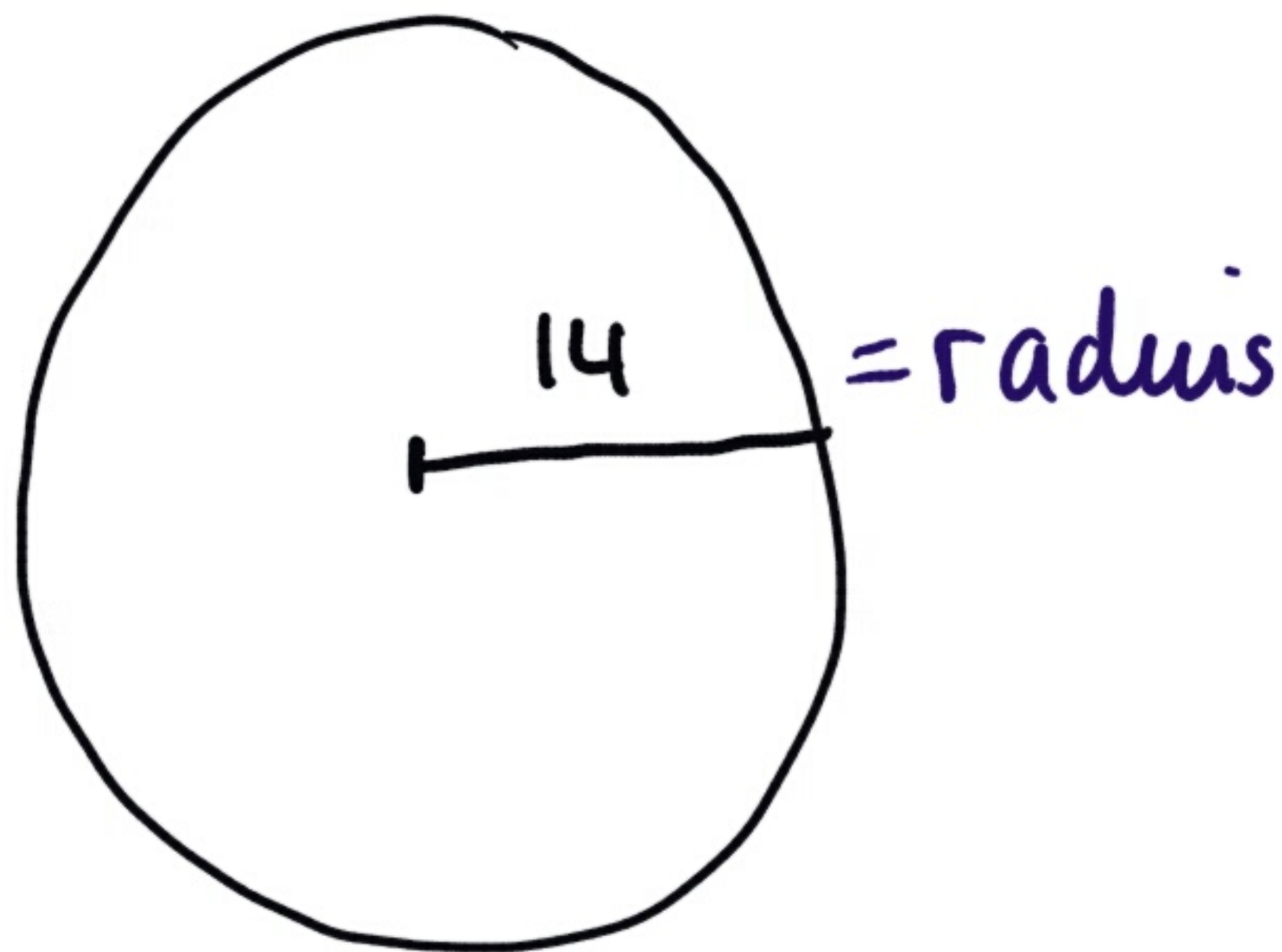
r = radius

$$\pi = 3.14 \text{ or } \frac{22}{7} \text{ or } \pi$$

C/W Pg 95

Q2 → 6.

Eg 1) Find the area, use  $\pi$  as  $\frac{22}{7}$



$$A = \frac{22}{7} \times (14)^2$$

$$A = 616$$

Find perimeter of the given circle.

Circumference

$$C = 2\pi r$$

$$C = 2 \times \frac{22}{7} \times 14$$

calculator

$$C = 88$$