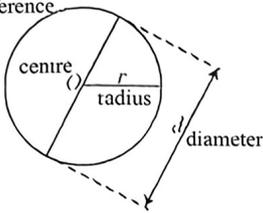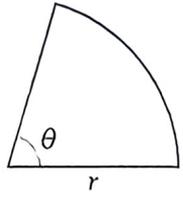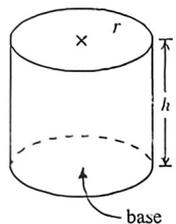# CCK F2 Ch11 Areas and Volumes II revision

S2 Maths 2$^{nd}$ term Core HW 3 Ch 11 (Revision)

Name: _____ (   )   Class: 2 ____   Date: _____

1. The table below are the formulas related to volumes and areas. Complete the table.

| **Circle** | Circumference | Area |
| --- | --- | --- |
| Circumference, centre $O$, $r$ radius, $d$ diameter | = _____  = _____ | = _____ |
| **Sector** | Arc length  = _____  Perimeter  = _____ | Area  = _____ |
| $\theta$, $r$ | | |
| **Right Circular Cylinder** | Curved surface area  = _____  Total surface area  = _____ | Volume  = _____ |
| $r$, $h$, base | | |

2. In the figure, $AOB$ is a sector with centre $O$. It is given that $\overset{\frown}{AB} = 2.5\pi$ cm and $\angle AOB = 45°$. [Q8]
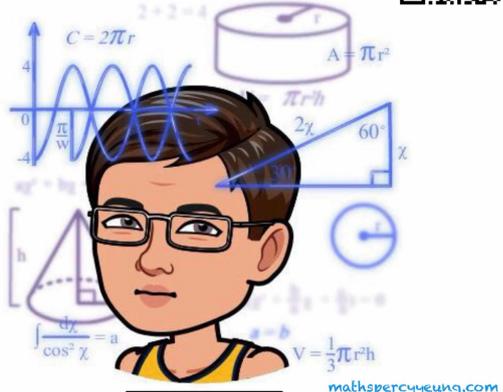   (a) Find the length $AO$.

   2.5$\pi$ cm   45°   $O$   $A$   $B$
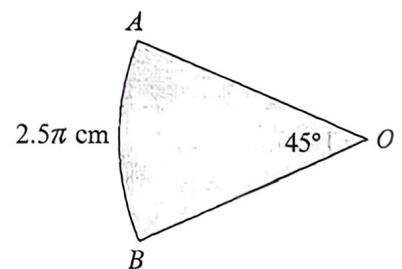
   (b) Find the area of the sector.
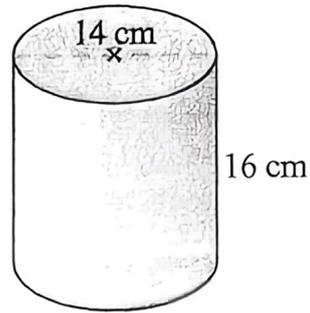
3. Find the volumes, the curved surface areas and the total surface areas of the following right circular cylinders. (Give your answers in terms of π)   [Q11]

(a)

6 cm

8 cm

(b)

14 cm

16 cm

volume        = _____

= _____

curved area   = _____

= _____

total surface area = _____

= _____

volume        = _____

= _____

curved area   = _____

= _____

total surface area = _____

= _____

4. Find the unknown in each of the following right circular cylinders.   [Q12]

(a)

$r$ cm

4 cm

volume $= 169\pi$ cm$^3$

(b)

11 cm        $h$ cm
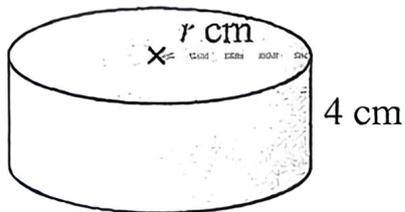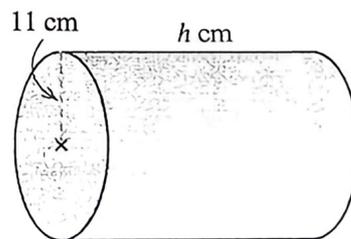
total surface area $= 660\pi$ cm$^2$