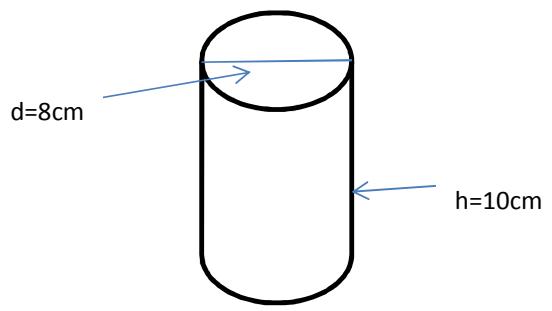
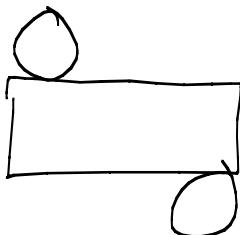


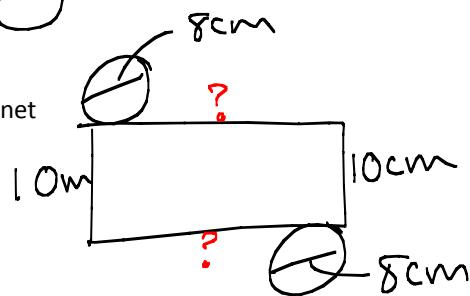
### How to find the surface area of a cylinder



1. Draw the net.



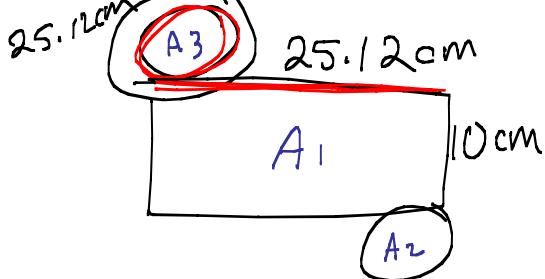
2. Label any given dimensions on the net



3. Find the circumference of the circle  $C = 2\pi r$  OR  $C = d\pi$

$$C = d\pi = 8 \times 3.14 = 25.12 \text{ cm}$$

4. Use the circumference to give you the second dimension of the rectangle.



5. Find the area of the rectangle and circles  $A = l \times w$  and  $A = \pi r^2$

$$A_1 = l \times w \\ = 25.12 \times 10 \\ = 251.2 \text{ cm}^2$$

$$A_2 = \pi r^2 \\ = 3.14 \times 4^2 \\ = 3.14 \times 16 \\ = 50.24 \text{ cm}^2$$

$$r = \frac{d}{2} = \frac{8}{2} = 4$$

$$A_3 = 50.24 \text{ cm}^2$$

6. Add up the 3 areas.

$$A_T = 251.2 \text{ cm}^2 + 50.24 \text{ cm}^2 + 50.24 \text{ cm}^2 \\ = 351.68 \text{ cm}^2$$

Your Turn:

