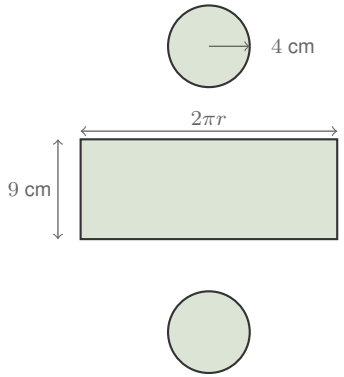
Use the π key unless a question says otherwise. Give answers to one decimal place where they are not exact. **Every question asks for the curved surface and the total separately. Keep them on separate lines.**

1 This is the net of a closed cylinder of radius 4 cm and height 9 cm.



(a) Find the width of the rectangle (2)

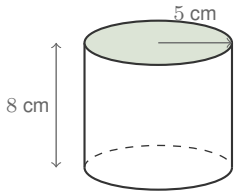
(b) Find the area of the rectangle, which is the curved surface area (2)

(c) Find the area of the two circles (2)

(d) Find the total surface area (1)

(7 marks)

2 A closed cylinder has radius 5 cm and height 8 cm.



(a) Find the curved surface area (2)

(b) Find the area of the two circles (2)

(c) Find the total surface area (1)

(5 marks)

3 A closed cylinder has radius 3 cm and height 10 cm.

(a) Curved surface area (2)

(b) Total surface area (2)

(4 marks)

4 A closed cylinder has diameter 14 cm and height 20 cm.

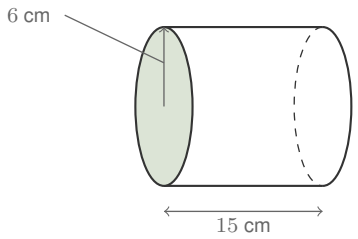
(a) Write down the radius (1)

(b) Curved surface area (2)

(c) Total surface area (2)

(5 marks)

5 A closed cylinder has radius 6 cm and height 15 cm.



(a) Curved surface area (2)

(b) Total surface area (2)

(4 marks)

6 A closed cylinder has radius 2 cm and height 2 cm.

(a) Curved surface area (2)

(b) Area of the two circles (2)

(c) **The two answers are equal. Explain why.** (2)

(6 marks)