3.

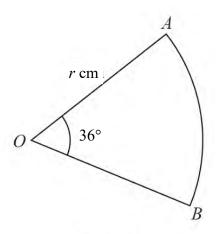


Figure 1

Figure 1 shows a sector AOB of a circle with centre O, radius r = 7 cm and angle $AOB = 36^{\circ}$.

The attempt of a student to find the area of the sector is shown below.

Area of sector
$$= \frac{1}{2}r^2\theta$$
$$= \frac{1}{2} \times 7^2 \times 36$$
$$= 882 \text{ cm}^2$$

(a) Explain the error made by this student.

(1)

(b) Write out a correct solution.

(2)

(Total for Question 3 is 3 marks)