4

A

Diagram **NOT**
accurately drawn

1.2 rad

O   B

Figure 2

Figure 2 shows an arc AB of a circle with centre O. The arc subtends an angle of 1.2 radians at O and the area of the sector AOB is 15 cm².

Find

(a) the radius of the circle,

(2)

(b) the length of the arc AB,

(2)

(c) the area of the shaded segment, giving your answer to 3 significant figures.

(3)

Question 4 continued

(Total for Question 4 is 7 marks)