3

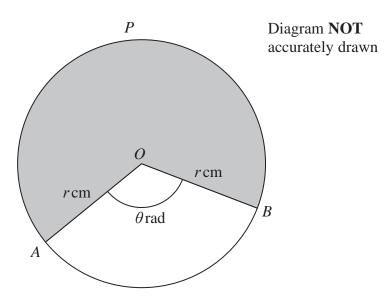


Figure 1

Figure 1 shows a circle, centre O, with radius r cm.

The points A, P and B lie on the circle.

The obtuse angle  $AOB = \theta$  radians.

The area of the sector *APBO*, shown shaded, is 372.4 cm<sup>2</sup> and the length of the arc *APB* is 53.2 cm.

Find, to 3 significant figures where appropriate, the value of

- (i) *r*
- (ii)  $\theta$

(6)

	Question 3 continued
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