

Similar shapes - ratios of areas and volumes – Answers

(All answers are given to 3 significant figures)

Sectors and arcs

1) (a) (i) 30.7cm^2 (ii) 7.68cm (iii) 23.7cm

(b)(i) 43.0cm^2 (ii) 14.3cm (iii) 26.3cm

(c)(i) 49.1cm^2 (ii) 19.6cm (iii) 29.6cm

2) Area = 6.98cm^2 Perimeter = 11.0cm

Segments and chords

1) (a) 152cm^2 (b) 30.6cm (c) 34.9cm (d) 65.5cm

2) (a) 61.9° (b) 192cm^2 (c) 30cm

3) 32.7cm^2

More Segments and chords

1) (a) 3.83cm^2 (b) 301cm^2

2) (a) 7.32cm (b) 36.3cm

3) (a) 90cm (b) 106° (c) 100100cm^2 (d) 240cm