In your calculations use the value of pi to 6 places of decimals : $\pi = 3.141593$

1. Calculate the length of the arc subtended from the centre of each circle, given the angle of each arc and circle radius. (all measurements in cm, answers to 2 d.p.)

(a) 45^o , 3 (b) 64^o , 7 (c) 89^o , 15

(d) 25^o , 11 (e) 95^o , 19 (f) 127^o , 23

2. For each circle calculate the area of each sector, given the sector angle and circle radius. (all measurements in cm, answers to 2 d.p.)

(a) 36^o , 9 (b) 135^o , 12 (c) 241^o , 21

(d) 345^o , 14 (e) 141^o , 22 (f) 45^o , 37

3. Given sector angle and circle radius calculate the chord length for the each sector. (all measurements in cm, answers to 2 d.p.)

(a) 25^o , 11 (b) 148^o , 33 (c) 103^o , 46

(d) 174^o , 8 (e) 40^o , 28 (f) 74^o , 38

4. Given sector angle and circle radius calculate area of each minor segment. (all measurements in cm, answers to 2 d.p.)

(a) 57^o , 17 (b) 125^o , 55 (c) 142^o , 16

1.

(a) 2.36 (b) 7.82 (c) 23.3

(d) 4.80 (e) 31.50 (f) 50.98

2.

(a) 25.45 cm^2 (b) 169.65 cm^2 (c) 927.51 cm^2

(d) 590.12 cm^2 (e) 595.57 cm^2 (f) 537.63 cm^2

3.

(a) 4.76 (b) 63.44 (c) 72.00

(d) 15.98 (e) 19.15 (f) 45.74

4.

(a) 22.57 cm^2 (b) 2060.80 cm^2 (c) 238.43 cm^2