TRIGONOMETRY





- 8 The minor arc *AB* of a circle, centre *O*, has length 46.2 cm. Given that $\angle AOB = 78.5^{\circ}$, find
 - **a** the distance *OA*, **b** the perimeter of sector *OAB*.

continued

TRIGONOMETRY

9 Find, in cm^2 to 1 decimal place, the area of each of the following circular sectors.



- 10 PQ is an arc of a circle of radius 8 cm, centre O.Given that arc PQ has length 12 cm, find
 - **a** the angle, in radians, subtended by *PQ* at *O*,
 - **b** the area of sector *OPQ*.



$O = 1.4^{\circ}$

The diagram shows a circle of radius 11.6 cm, centre *O*. The arc of the circle *AB* subtends an angle of 1.4 radians at *O*. Find, to 3 significant figures,

- **a** the perimeter of the minor sector *OAB*,
- **c** the area of the minor sector *OAB*,
- **b** the perimeter of the major sector *OAB*,
- **d** the area of the major sector *OAB*.

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The diagram shows a circular sector OAB. Find the area of

- **a** the sector *OAB*, **b** the triangle *OAB*,
- c the shaded segment.
- 13 Find the area of the shaded segment in each of the following circular sectors.

