

## 6A

- 1 a i  $40.72 \text{ cm}^2$  ii  $22.62 \text{ cm}$   
b i  $63.62 \text{ cm}^2$  ii  $28.27 \text{ cm}$   
c i  $1.13 \text{ cm}^2$  ii  $3.77 \text{ cm}$
- 2 a i Arc length is  $8.64 \text{ cm}$  ii Sector area is  $23.76 \text{ cm}^2$   
b i Arc length is  $16.49 \text{ cm}$  ii Sector area is  $28.86 \text{ cm}^2$
- 3  $4.07 \text{ cm}$
- 4 a i area is  $84.57 \text{ cm}^2$  ii perimeter is  $48.57 \text{ cm}$   
b i area is  $64.27 \text{ cm}^2$  ii perimeter is  $29.85 \text{ cm}$
- 5 a  $30.9 \text{ cm}^2$  b  $69.12 \text{ cm}^2$
- 6 a i Arc length is  $3.3 \text{ cm}$  ii Sector area is  $11.55 \text{ cm}^2$   
b i Arc length is  $7.2 \text{ cm}$  ii Sector area is  $9 \text{ cm}^2$   
c i Arc length is  $43.98 \text{ cm}$  ii Sector area is  $184.73 \text{ cm}^2$

## 6B-6C

- 1 a  $7.6 \text{ cm}$  b  $17.0 \text{ cm}$
- 2 a  $8.49 \text{ cm}$  (3 s.f.) b  $9.33 \text{ cm}$  (3 s.f.)
- 3 a  $11.3 \text{ cm}$  (3 s.f.) b  $103 \text{ m}$  (3 s.f.)
- 4 a Yes b No
- 5  $0.56 \text{ cm}^2$