



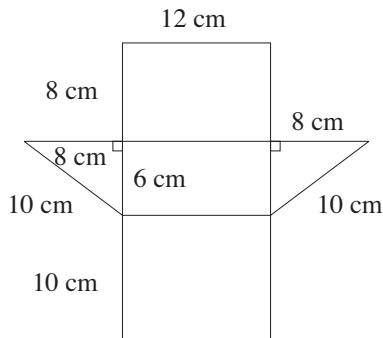




5 Surface Area

1. (a)  $96 \text{ cm}^2$       (b)  $136 \text{ cm}^2$       (c)  $236 \text{ cm}^2$       (d)  $62 \text{ cm}^2$   
 (e)  $250 \text{ cm}^2$       (f)  $30.4 \text{ cm}^2$
2. (a)  $108.38 \text{ cm}^2$  (to 2 d.p.)      (b)  $283 \text{ cm}^2$  (to the nearest  $\text{cm}^2$ )  
 (c)  $207 \text{ cm}^2$  (to the nearest  $\text{cm}^2$ )      (d)  $69 \text{ m}^2$  (to the nearest  $\text{m}^2$ )  
 (e)  $12.6 \text{ m}^2$  (to 1 d.p.)      (f)  $115 \text{ cm}^2$  (to the nearest  $\text{cm}^2$ )
3. (a)  $13\,195 \text{ cm}^2$  (to the nearest  $\text{cm}^2$ )      (b)  $35\,000 \text{ cm}^2$
4. (a)  $54 \text{ cm}^2$       (b)  $66 \text{ cm}^2$       (c)  $120 \text{ cm}^2$

5.



$$A = 336 \text{ cm}^2$$

6.  $11\,027 \text{ cm}^2$   
 (Total surface area =  $(2 \times 25\pi \times 12) + 2(40^2\pi - 25^2\pi) + (2 \times 40\pi \times 12)$ )
7. (a) (i)  $R(-1, 9, 0)$       (ii)  $B(3, 9, 6)$       (b) (i)  $PQ = 5 \text{ cm}$       (ii)  $QR = 4 \text{ cm}$   
 (c)  $CR = 6 \text{ cm}$ , hence the total surface area is  $2(4 \times 6 + 4 \times 5 + 6 \times 5) = 148 \text{ cm}^2$ .
8.  $1.1 \text{ m}^2$
9.  $7\pi \text{ cm}^2$
10.  $126.7 \text{ cm}^2$
11.  $56 \text{ cm}^2$
12.  $108.8 \text{ cm}^2$