

# Chapter 8 Chapter Review

## Answers

- 8→ 1. a) For example, I estimated  $8 \text{ cm}^2$ ; I measured  $8 \text{ cm}^2$ .  
 b) For example, I estimated  $8 \text{ cm}^2$ ; I measured  $9 \text{ cm}^2$ .
- 8→ 2. a) For example, I measured with a centimetre grid transparency and got approximately  $54 \text{ cm}^2$ . When I measured with gravel and a centimetre grid I got more, approximately  $58 \text{ cm}^2$ .  
 b) For example, I used a centimetre grid transparency and counted all the squares that were more than half covered and got approximately  $28 \text{ cm}^2$ .

8→ 3. a), b)

Side 1 (cm)	Side 2 (cm)	Area ( $\text{cm}^2$ )
19	1	19
18	2	36
17	3	51
16	4	64
15	5	75
14	6	84
13	7	91
12	8	96
11	9	99
10	10	100

c)  $12 \text{ cm} \times 8 \text{ cm}$

$$\begin{array}{r} \text{8→ 4. a)} \quad 45 \text{ m} \\ \times \quad 55 \text{ m} \\ \hline 225 \\ + 225 \\ \hline 2475 \text{ m}^2 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 17 \text{ cm} \\ \times \quad 9 \text{ cm} \\ \hline 153 \text{ cm}^2 \end{array}$$

- 8→ 5. a) For example,  $6 \text{ cm} \times 3 \text{ cm} = 18 \text{ cm}^2$ ;  $1 \text{ cm} \times 3 \text{ cm} = 3 \text{ cm}^2$ ;  $18 \text{ cm}^2 + 3 \text{ cm}^2 = 21 \text{ cm}^2$ .  
 b) For example,  $3 \text{ m} \times 5 \text{ m} = 15 \text{ m}^2$ ;  $2 \text{ m} \times 1 \text{ m} = 2 \text{ m}^2$ ;  $2 \text{ m} \times 2 \text{ m} = 4 \text{ m}^2$ ;  $15 \text{ m}^2 + 2 \text{ m}^2 + 4 \text{ m}^2 = 21 \text{ m}^2$ .
- 8→ 6. a)  $330 \text{ km}^2$   
 b) On the scale  $1 \text{ cm} = 1 \text{ km}$ , student models should show a rectangle measuring  $22 \text{ cm} \times 15 \text{ cm}$ .  
 c)  $330 \text{ cm}^2$
- 8→ 7. For example, (4, 1), (6, 1), (6, 2), (8, 2), (8, 5), (6, 6), (6, 10), (5, 12), (4, 10), (4, 6), (2, 5), (2, 2), (4, 2); put your pencil point at the first coordinate pair and draw a straight line to the second one, then draw a line to the third pair, and so on, until all the pairs are connected in the order listed.