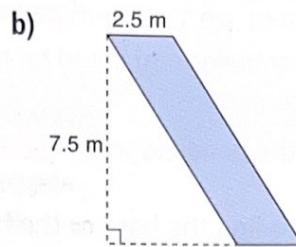
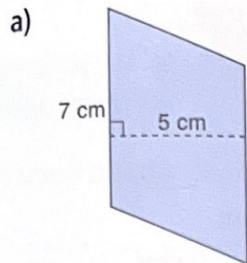


## Example

Calculate the area of each parallelogram.



The height can be drawn outside the parallelogram.

## A Solution

The area of a parallelogram is given by the formula  $A = bh$ .

a)  $A = bh$

Substitute:  $b = 7$  and  $h = 5$

$$A = 7 \times 5$$

$$= 35$$

The area of the parallelogram is  $35 \text{ cm}^2$ .

b)  $A = bh$

Substitute:  $b = 2.5$  and  $h = 7.5$

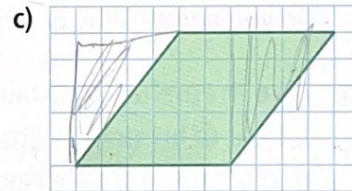
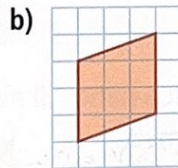
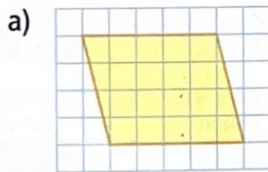
$$A = 2.5 \times 7.5$$

$$= 18.75$$

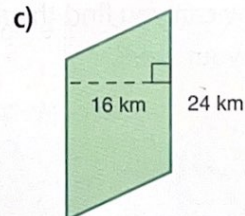
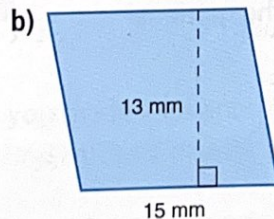
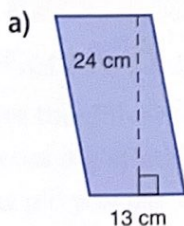
The area of the parallelogram is  $18.75 \text{ m}^2$ .

## Practice

- i) Copy each parallelogram on 1-cm grid paper.  
ii) Show how the parallelogram can be rearranged to form a rectangle.  
iii) Estimate, then find, the area of each parallelogram.



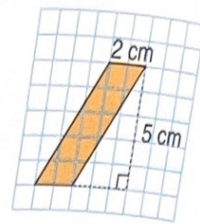
- Find the area of each parallelogram.



- a) On 1-cm grid paper, draw 3 different parallelograms with base 3 cm and height 7 cm.  
b) Find the area of each parallelogram you drew in part a. What do you notice?

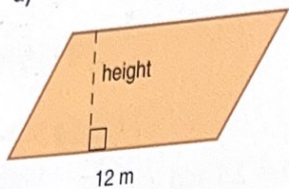
4. Repeat question 3. This time, you choose the base and height.  
Are your conclusions the same as in question 3? Why or why not?

5. Copy this parallelogram on 1-cm grid paper.  
a) Show how this parallelogram could be rearranged to form a rectangle.  
b) Find the area of the parallelogram.

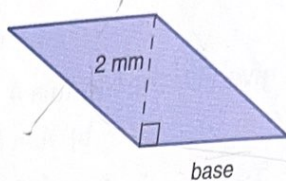


6. Use the given area to find the base or the height of each parallelogram.

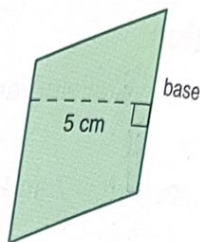
a) Area =  $60 \text{ m}^2$



b) Area =  $6 \text{ mm}^2$



c) Area =  $30 \text{ cm}^2$



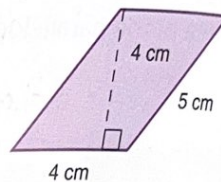
7. On 1-cm grid paper, draw as many different parallelograms as you can with each area.

a)  $10 \text{ cm}^2$

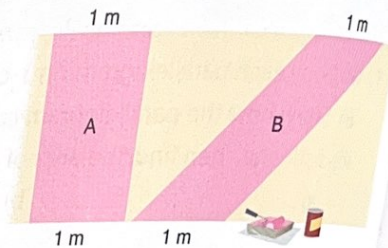
b)  $18 \text{ cm}^2$

c)  $28 \text{ cm}^2$

8. A student says the area of this parallelogram is  $20 \text{ cm}^2$ .  
Explain the student's error.

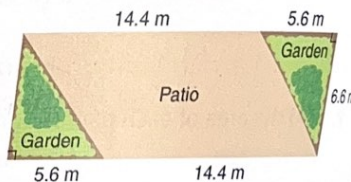


9. **Assessment Focus** Sasha is buying paint for a design on a wall. Here is part of the design.  
Sasha says Shape B will need more paint than Shape A.  
Do you agree? Why or why not?



10. **Take It Further** A restaurant owner built a patio in front of his store to attract more customers.

- What is the area of the patio?
- What is the total area of the patio and gardens?
- How can you find the area of the gardens?  
Show your work.



### Reflect

How can you use what you know about rectangles to help you find the area of a parallelogram?  
Use an example to explain.

➤ Make  
Add  
a par.  
This is  
Make a  
How do  
compare  
Record y

➤ Repeat the

➤ What is the  
What strateg

### Reflect & Sha

Share the different  
Discuss the strategie  
How did you use wh.  
to find the area of a tr  
Work together to write