

Area

Name:

Date:

INQUIRY

The Forbidden City in Beijing covers 720,000 m². How many NIS football fields is that?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Area	The amount of space inside a 2D shape. Units: cm ² , m ² , km ² .
Perpendicular height	The straight-up height at 90° to the base (NOT the slant).

Part A — Basic Area

1. Find the area of a square with side 9 cm. [1 marks]

Show your working:

2. Find the area of a rectangle 15 cm × 8 cm. [1 marks]

Show your working:

3. Find the area of a triangle with base 12 cm and height 7 cm. [2 marks]

Show your working:

4. Find the area of a parallelogram: base 10 cm, perpendicular height 6 cm. [2 marks]

Show your working:

Part B — Working Backwards

5. A rectangle has area 84 cm^2 . Length is 12 cm. Find the width. [2 marks]

Show your working:

6. A triangle has area 30 cm^2 and base 10 cm. Find the height. [2 marks]

Show your working:

Part C — Real-World Problems

7. NIS pool: $25 \text{ m} \times 16 \text{ m}$. Calculate surface area. Paint covers $10 \text{ m}^2/\text{L}$. How many litres for the floor? [3 marks]

Show your working:

8. Gyeongbokgung Palace (Gyeongbokgung) covers $\sim 410,000 \text{ m}^2$, roughly 820 m long. Estimate the width. [2 marks]

Show your working:

9. German football pitch: $105 \text{ m} \times 68 \text{ m}$. How many fit inside the Forbidden City ($720,000 \text{ m}^2$)? [3 marks]

Show your working: