

Chapter 5 | Composite 2-D Shapes

Worksheet A | Guided Practice

Name: _____ Grade: _____ Date: _____

Warm-up: Worked Examples

Example 1: Add Two Rectangles

Problem: An L-shaped floor is split into 8 m by 4 m and 5 m by 3 m rectangles.

Two parts

$$32 \text{ m}^2 + 15 \text{ m}^2$$

Answer

$$47 \text{ m}^2$$

Example 2: Subtract a Cut-Out Rectangle

Problem: A patio fits inside a 14 m by 9 m rectangle. A 4 m by 3 m corner is missing.

Full minus cut-out

$$126 \text{ m}^2 - 12 \text{ m}^2$$

Answer

$$114 \text{ m}^2$$

Example 3: Find a Missing Side First

Problem: An L-shape has total width 16 cm and a top section 10 cm wide. Find missing width.

Subtract

$$16 - 10 = 6$$

Answer

$$6 \text{ cm}$$

Example 4: Rectangle and Triangle Together

Problem: A garden has a 12 m by 5 m rectangle and triangle with base 12 m, height 4 m.

Rectangle + triangle

$$60 \text{ m}^2 + 24 \text{ m}^2$$

Answer

$$84 \text{ m}^2$$

Example 5: Compare Two Correct Splits

Problem: One L-shape split has areas 30 cm^2 and 18 cm^2 . Another has 24 cm^2 and 24 cm^2 .

Split 1

$$30 + 18 = 48$$

Split 2

$$24 + 24 = 48$$

Example 6: Common-Trap Cut-Out Error

Problem: A large 18 cm by 10 cm rectangle has a 6 cm by 4 cm rectangle cut out. A student adds the areas.

Wrong (adds)

$$180 + 24 = 204$$

Correct (subtracts)

$$180 - 24 = 156$$

Practice

1. Rectangles 6 cm by 4 cm and 3 cm by 6 cm. Find total area.

2. A 10 cm by 8 cm rectangle has a 3 cm by 2 cm cut-out. Find remaining.

3. Two rectangles are joined side by side. Add or subtract?

4. Full width 14 cm; one section 9 cm. Find missing width.

5. A corner is removed from a rectangle. Add or subtract?

6. Included areas 28 cm^2 and 16 cm^2 . Find total.

7. A triangle is attached to a rectangle. Add or subtract?

8. A 13 m^2 section is removed from 75 m^2 . Find remaining.

9. A rectangular hole is cut from a floor plan. Add or subtract?

10. Full height 12 m; one part 7 m. Find missing height.

11. Write correct unit for area measured in metres.

12. Explain “no gaps.”

13. Explain “no overlap.”

14. A full area is 100 cm^2 and cut-out is 20 cm^2 . Find remaining.

15. A rectangle area 30 cm^2 and triangle area 12 cm^2 . Find total.
