

Chapter 3 | Perimeter and Area Foundations

Worksheet B | Independent Practice

Name: _____ Grade: _____ Date: _____

Warm-up: Worked Examples

Example 1: Identify the Measurement

Problem: A homeowner is buying tiles to cover a kitchen floor. Should the homeowner find perimeter or area?

Covering a surface = inside $\Rightarrow$ area

Example 2: Find the Perimeter of a Rectangle

Problem: A picture frame is 13 cm long and 6 cm wide. Find its perimeter.

Add all sides $\Rightarrow 13 + 6 + 13 + 6 = 38$

Answer $\Rightarrow 38$ cm

Example 3: Find the Area of a Rectangle

Problem: A poster is 9 m long and 4 m wide. Find its area.

Multiply $\Rightarrow 9 \times 4 = 36$

Answer $\Rightarrow 36$ m²

Example 4: Same Rectangle, Two Measurements

Problem: A rectangle is 10 cm by 7 cm. Find both perimeter and area.

Perimeter $\Rightarrow 10 + 7 + 10 + 7 = 34$ cm

Area $\Rightarrow 10 \times 7 = 70$ cm²

Example 5: Perimeter and Area of a Square

Problem: A square has side length 8 m. Find its perimeter and area.

Perimeter $\Rightarrow 4 \times 8 = 32$ m

Area $\Rightarrow 8^2 = 64$ m²

Example 6: Common-Trap Formula Choice

Problem: A rectangle is 7 cm by 5 cm. A student says $7 \times 5 = 35$, so the perimeter is 35 cm. Explain the mistake.

Wrong (area, not perimeter) $\Rightarrow 7 \times 5 = 35$ cm²

Correct perimeter $\Rightarrow 7 + 5 + 7 + 5 = 24$ cm

Practice

1. Find perimeter: rectangle 7 cm by 2 cm.

2. Find area: rectangle 7 cm by 2 cm.

3. Find perimeter: square side 8 cm.

4. Find perimeter: rectangle 11 m by 4 m.

5. Find area: rectangle 13 m by 3 m.

6. Find perimeter: square side 13 m.

7. Find perimeter: rectangle 14 cm by 6 cm.

8. Find area: rectangle 14 cm by 6 cm.

9. Find area: square side 8 cm.

10. Find area: square side 13 m.

11. A field is 18 m by 7 m. How much fencing is needed?

12. A wall is 12 m by 5 m. What paintable area does it have?

13. A photo is 15 cm by 10 cm. What border goes around it?

14. A tabletop is 120 cm by 60 cm. What is its area?

15. A square garden has side 12 m. Find perimeter and area.
