

8.1 Area and Square Units

Chapter 8: Geometry and Measurement

Name: _____

Date: _____

Class/Period: _____

Problem 8.1 Find the area of a 7×13 rectangle.

Problem 8.4 A square has side length 8. Find its area and perimeter.

Problem 8.2 Find the perimeter of a 7×13 rectangle.

Problem 8.5 Find the area of a rectangle measuring 4.5 cm by 2.8 cm.

Problem 8.3 A rectangle has area 96 and base 12. Find its height.

Problem 8.6 Find the area of a rectangle measuring $\frac{3}{4}$ m by $\frac{5}{6}$ m.

8.1 Area and Square Units

Chapter 8: Geometry and Measurement

Problem 8.7 A rectangle has area $15\frac{3}{4} \text{ ft}^2$ and width $3\frac{1}{2} \text{ ft}$. Find its length.

Problem 8.10 Can two rectangles have equal area but different perimeters? Give an example.

Problem 8.8 A rectangle measures 3 feet by 20 inches. Convert to one unit and find its area.

Problem 8.11 Explain why 12 cm^2 cannot be the perimeter of a figure.

Problem 8.9 Can two rectangles have equal perimeter but different areas? Give an example.

Problem 8.12 Draw two noncongruent rectangles with area 36 square units.

8.1 Area and Square Units

Chapter 8: Geometry and Measurement

Problem 8.13 A rectangle has whole-number side lengths and area 60. List every possible pair of side lengths and determine which rectangle has the least perimeter.

Problem 8.15 A rectangle is enlarged so that each side length is doubled. Predict and then calculate how its area changes.

Problem 8.14 A square and a rectangle both have perimeter 32. The rectangle has length 10. Compare their areas.

Problem 8.16 A floor measures 14 feet by 11 feet. Tiles cover 2 ft^2 each. How many tiles are needed if no tile is wasted?