

8.5 Composite Area

Chapter 8: Geometry and Measurement

Name: _____

Date: _____

Class/Period: _____

Problem 8.65 Outer rectangle 12×9 , corner cutout 4×3 . Find remaining area.

Problem 8.68 A 20×12 rectangle has two 3×4 windows removed. Find remaining area.

Problem 8.66 Outer square side 14, inner square side 8. Find frame area.

Problem 8.69 A trapezoid with bases 8 and 14 and height 5 contains a 3×4 rectangular hole. Find shaded area.

Problem 8.67 A 10×6 rectangle has a triangular top with base 10 and height 4. Find total area.

Problem 8.70 A 16×10 rectangle has a right triangle of legs 6 and 8 removed. Find remaining area.

8.5 Composite Area

Chapter 8: Geometry and Measurement

Problem 8.71 Explain two ways to find an L-shape's area.

Problem 8.74 An outer rectangle is 18×11 . A centered opening is 12×5 . Find frame area.

Problem 8.72 A house shape is 9 wide, wall height 7, total height 12. Find area.

Problem 8.75 Create two decompositions of a pentagon into familiar shapes.

Problem 8.73 A rectangular border extends 2 units around a 10×6 rectangle. Find border area.

Problem 8.76 Explain how to check that a decomposition counts each point once.

8.5 Composite Area

Chapter 8: Geometry and Measurement

Problem 8.77 A figure is a 14×8 rectangle with an isosceles triangular roof. The total area is 154. Find the roof height.

Problem 8.79 A composite figure can be split into a rectangle and triangle or enclosed in a larger rectangle. Invent dimensions for which both methods require exactly two calculations, then solve.

Problem 8.78 A rectangular frame has uniform width 2. Its outer dimensions are 18×12 . Find the inner dimensions and frame area.

Problem 8.80 A shaded region equals a 20×15 rectangle minus a trapezoid of bases 6 and 12 and height 8. Find the shaded area.