Lesson 15: Area of Composite Shapes

Year 10 Mathematics Unit 1 — Block C | Worksheet

Name _____ Date _____ Class _____

Multiple Choice

Q1. What is the area of a triangle with base 12 cm and perpendicular height 5 cm?

A) 30 cm^2 B) 60 cm^2 C) 17 cm^2 D) 7 cm^2

Q2. A composite shape consists of a rectangle 8 m by 5 m with a triangle of base 5 m and height 3 m on top. What is the total area?

A) 47.5 m^2 B) 55 m^2 C) 40 m^2 D) 23.5 m^2

Q3. A square of side 9 cm has a smaller square of side 3 cm removed from one corner. What is the remaining area?

A) 81 cm^2 B) 72 cm^2 C) 78 cm^2 D) 54 cm^2

Q4. Which strategy is most efficient for finding the area of a rectangular field with a circular pond in the middle?

A) Addition strategy B) Subtraction strategy C) Multiply all side lengths D) Perimeter calculation

Q5. A sector has radius 6 cm and angle 60 degrees. What is its area?

A) 6pi cm^2 B) 36pi cm^2 C) 12pi cm^2 D) 3pi cm^2

Short Answer

Q6. Find the area of a trapezium with parallel sides 10 cm and 6 cm, and height 4 cm. *(2 marks)*

Q7. A rectangular deck 15 m by 10 m has a circular spa of radius 2.5 m built into it. Find the area of the deck surrounding the spa, to 1 decimal place. *(3 marks)*

Q8. A garden bed is an L-shape made from two rectangles. Explain how you could find its area using both addition and subtraction strategies. *(3 marks)*

Key Formulas

- Write any formulas you need here.