

Area of Compound Figures - Practice Worksheet

Name: _____ Date: _____

Instructions: Find the area of each compound figure. Split each shape into simpler parts, calculate each part's area, then add or subtract to find the total. Show your working. Units are in the same unit as given (cm, m, or ft).

1. An L-shape is made of two rectangles. Rectangle A is 8 cm wide and 2 cm tall. Rectangle B is 3 cm wide and 6 cm tall. What is the total area?

2. A rectangle 10 m long and 5 m wide has a 2 m x 3 m rectangular notch cut from one corner. What is the remaining area?

3. A T-shape: the top bar is 12 cm wide and 3 cm tall; the vertical stem is 4 cm wide and 7 cm tall. What is the total area?

4. A compound shape is a 6 ft x 6 ft square with a right triangle attached to its right side. The triangle has a base of 4 ft and a height of 6 ft. What is the total area?

5. A shape looks like a plus sign (+). Each arm is 2 m wide and 5 m long, and the center square is 2 m x 2 m. What is the total area?

6. A compound figure has a large rectangle 15 cm x 8 cm with a semicircle of diameter 8 cm added to one short end. Use $\pi = 3.14$. What is the total area?

7. An irregular rectilinear shape has overall dimensions 10 m x 8 m, but a 4 m x 3 m rectangle is missing from the top-right corner. What is the area?

8. A compound shape is made of a rectangle 9 ft x 4 ft and a triangle on top with base 9 ft and height 5 ft. What is the total area?

9. A running track end-cap shape: a rectangle 20 m x 7 m with a full circle of diameter 7 m centered on one short end (the circle sits outside the rectangle). Use $\pi = 3.14$. What is the total area?

10. A compound figure: a large right triangle with base 12 cm and height 10 cm, with a rectangle of 4 cm x 3 cm cut out from inside it. What is the remaining area?

Answer Key

- 34 sq cm ($A = 8 \times 2 = 16$; $B = 3 \times 6 = 18$; total = $16 + 18 = 34$)
- 44 sq m ($10 \times 5 = 50$; notch = $2 \times 3 = 6$; $50 - 6 = 44$)
- 64 sq cm (top = $12 \times 3 = 36$; stem = $4 \times 7 = 28$; total = $36 + 28 = 64$)

4. 48 sq ft (square = 36; triangle = $0.5 \times 4 \times 6 = 12$; total = $36 + 12 = 48$)
5. 32 sq m
6. 145.12 sq cm (rectangle = $15 \times 8 = 120$; semicircle = $0.5 \times 3.14 \times 4^2 = 0.5 \times 3.14 \times 16 = 25.12$; total = $120 + 25.12 = 145.12$)
7. 68 sq m ($10 \times 8 = 80$; missing = $4 \times 3 = 12$; $80 - 12 = 68$)
8. 58.5 sq ft (rectangle = $9 \times 4 = 36$; triangle = $0.5 \times 9 \times 5 = 22.5$; total = $36 + 22.5 = 58.5$)
9. 178.465 sq m (rectangle = $20 \times 7 = 140$; circle = $3.14 \times 3.5^2 = 3.14 \times 12.25 = 38.465$; total = $140 + 38.465 = 178.465$ sq m)
10. 48 sq cm (triangle = $0.5 \times 12 \times 10 = 60$; rectangle cut = $4 \times 3 = 12$; $60 - 12 = 48$)