

## ANSWERS

# AREA OF COMPOUND SHAPES

**Instructions:** Solve each problem by dividing the compound shape into simpler figures such as rectangles, triangles, or circles. Calculate the area of each part, then add or subtract as needed to find the total or remaining area. Write only the final answer for each exercise.

Problem	Answer
✓ A plaza is a square with a side length of 20 m, but a circular fountain of radius 5 m is in the center. What is the remaining area of the plaza?	122.86 m <sup>2</sup>
✓ A poster is a rectangle measuring 24 in by 18 in with a circular cut-out of radius 6 in. What is the total area of the poster after the cut-out?	300 in <sup>2</sup>
✓ A swimming area is shaped like a rectangle (25 m by 15 m) with a triangular diving board section (base 10 m, height 8 m) attached. What is the total area of the swimming area?	415 m <sup>2</sup>
✓ A barn door is a rectangle measuring 8 ft by 4 ft with a semicircular top of radius 2 ft. What is the total area of the barn door?	41.14 ft <sup>2</sup>
✓ A classroom floor is shaped like a trapezoid with parallel sides of 10 m and 8 m and a height of 6 m. A rectangular closet (2 m by 2 m) is excluded. What is the remaining floor area?	52 m <sup>2</sup>

How Did You Do? 😊 😐 😞