ANSWERS

AREA OF COMPOUND SHAPES

Instructions: Read each problem carefully, divide the compound shape into simpler geometric figures, calculate the area of each section, and add or subtract areas as needed to find the total or remaining area.

a) A park is shaped like an 'L'. The horizontal section is 30 m long and 10 m wide, and the vertical section is 20 m long and 10 m wide. What is the total area of the park?

Answer:

Horizontal: $30 \times 10 = 300\ m^2$

Vertical: $20 \times 10 = 200\ m^2$

Total Area: $300 + 200 = 500\ m^2$

b) A rectangular garden measures 40 m by 25 m, but has a circular pond in the center with a radius of 5 m. What is the area of the garden without the pond?

Answer:

Garden: $40 \times 25 = 1{,}000\ m^2$

Pond: $\pi r^2 = 3.14 \times 52 = 78.5\ m^2$

Remaining Area: $1{,}000 - 78.5 = 921.5\ m^2$

c) A parking lot has two sections: a rectangle of 50 m by 30 m and a rectangular triangle with a base of 30 m and a height of 20 m. What is the total area of the parking lot?

Answer:

Rectangle: $50 \times 30 = 1{,}500\ m^2$

Triangle: $\frac{1}{2} \times 30 \times 20 = 300\ m^2$

Total Area: $1{,}500 + 300 = 1{,}800\ m^2$

How Did You Do? ☺ 😐 ☹