MATC9 Ch2.4 Key Concepts 2 Areas of Composite Figures Worked Example
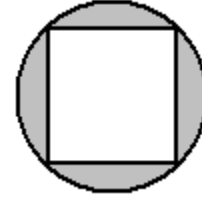
Example: A circular template with a radius of 10 cm had a square with a side of 14.1 cm cut out of it, as shown. Find the area remaining.
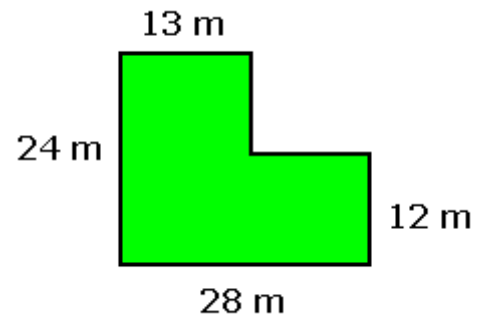
Solution: The shaded area is equal to the area of the circle minus the area of the square.

$A = \pi r^2 - l \times w$

$\quad = \pi \times 10^2 - (14.1 \times 14.1)$

$\quad = 115.3 \text{ cm}^2$

The area is 115.2 cm².

Practice:

1. Santander had an L-shaped back yard, as shown. Find the area of the yard.

13 m

24 m

12 m

28 m

2. The pattern for a shirt called for a piece as shown. Find the area of the piece.

14 cm

21 cm
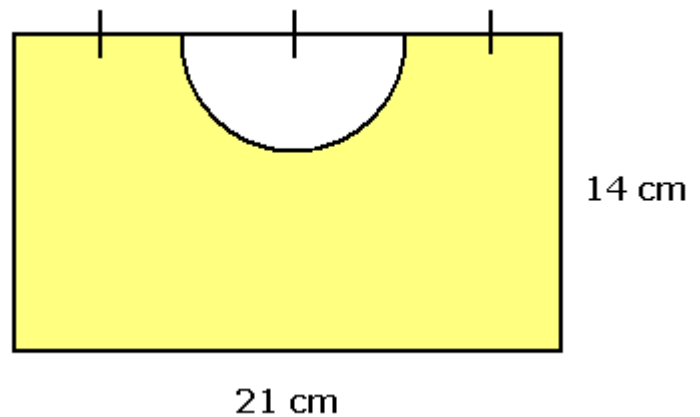
Answers: 1. 492 m²   2. 274.8 cm²