

Composite Figures

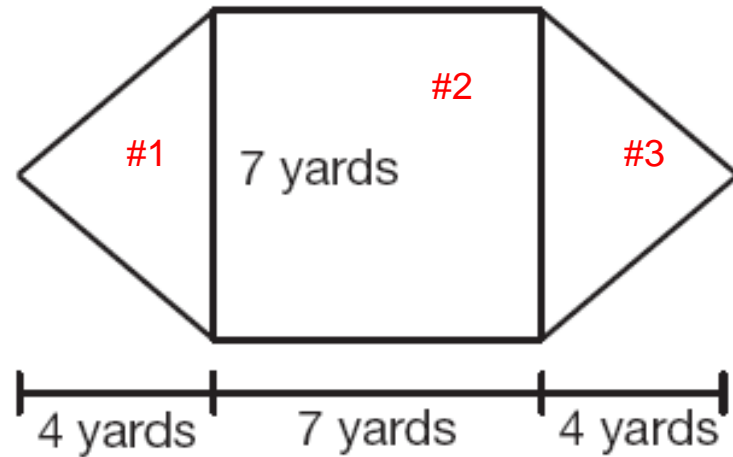
- A **composite** figure is formed from two or more shapes.

To find the area of a composite figure:

- Identify and number each shape in the figure.
- Find the area of each shape & then add them up.
- To find the area of a shaded region, you need to subtract the unshaded region.

Example #1: Find the area of the composite figure.

The composite figure contains 2 triangles and 1 square. We need to find the area of each region.



Area of #1 Triangle:

$$A = \frac{1}{2} bh$$

$$A = \frac{1}{2} (7)(4)$$

$$A = \frac{1}{2} (28)$$

$$A = 14 \text{ yd}^2$$

Area of #2 Square:

$$A = bh$$

$$A = 7(7)$$

$$A = 49 \text{ yd}^2$$

Total Area of Figure:

Add up areas of 2 triangles and square.



$$A = 2(14) + 49$$

$$A = 28 + 49 = \mathbf{77 \text{ yd}^2}$$

Example #2: Find the area of the figure.

The figure contains:

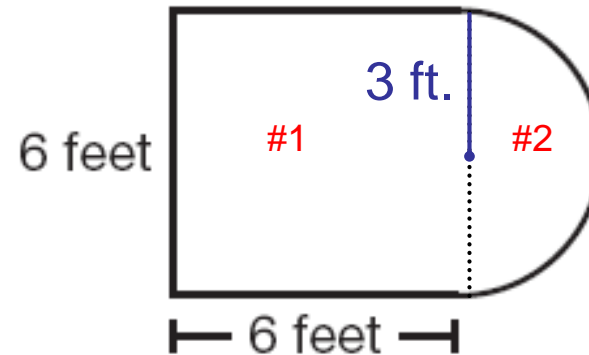
1 square and a Semicircle

Area of #1 Square:

$$A = bh$$

$$A = 6(6)$$

$$A = 36 \text{ ft}^2$$



Area of #2 Semicircle

$$A = \frac{1}{2}\pi r^2$$

$$A = \frac{1}{2}\pi(3)^2$$

$$A = \frac{1}{2}(9)\pi$$

$$A = 4.5\pi \text{ ft}^2$$

Total Area of Figure:

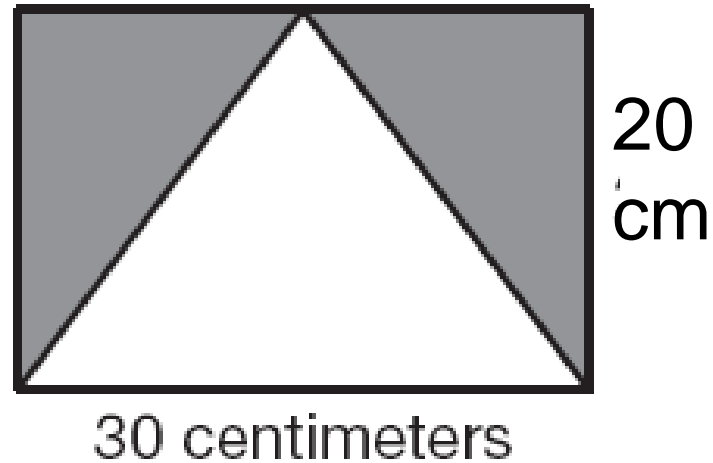
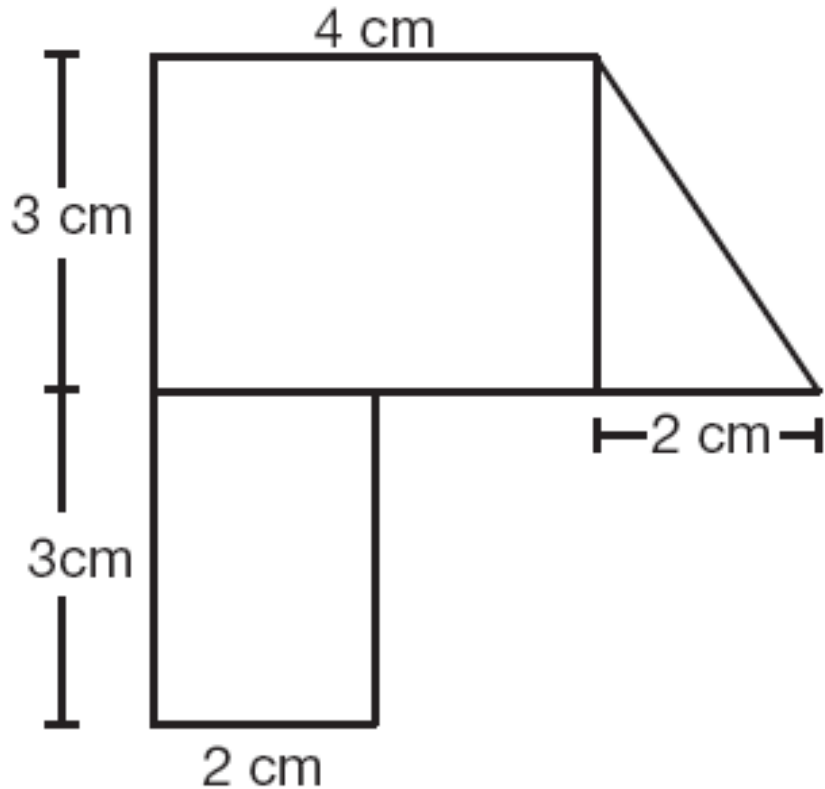
Add areas of the square
and semicircle:

$$A = 36 + 4.5\pi \text{ ft}^2$$

QUIZ TIME!

Show ALL of your work!

1. Find the area of the composite figure below.



2. Find the area of the shaded region above.