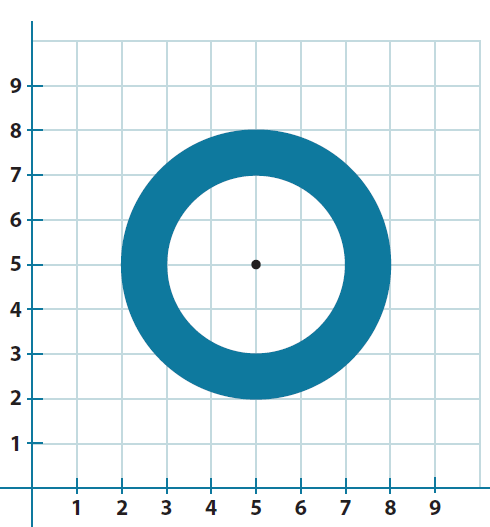
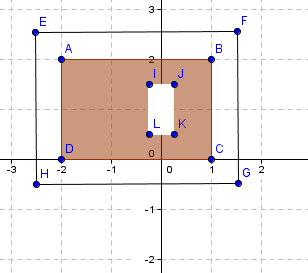
Lesson 20: Composite Area Problems

Classwork

Example 1

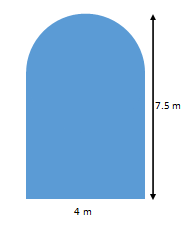
Find the composite area of the shaded region. Use for .

Exercise 1

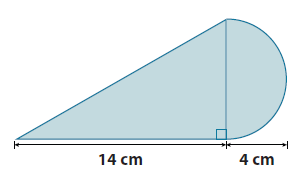
A yard is shown with the shaded section indicating grassy areas and the unshaded sections indicating paved areas. Find the area of the space covered with grass in units2.

Example 2

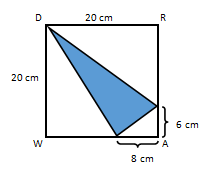
Find the area of the figure that consists of a rectangle with a semicircle on top. Use for .

****

Exercise 2

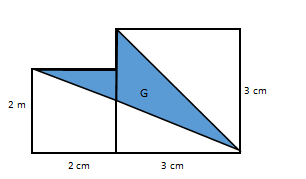
Find the area of the shaded region. Use for .

**Example 3**

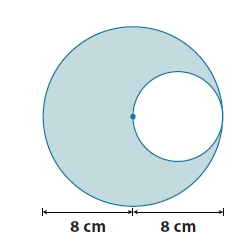
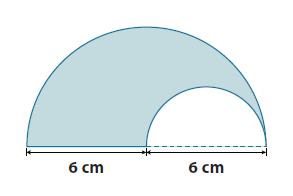
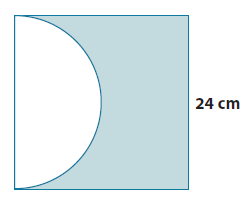
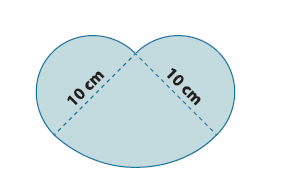
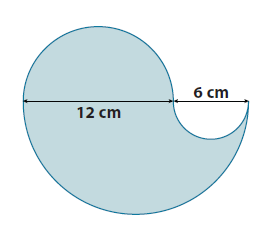
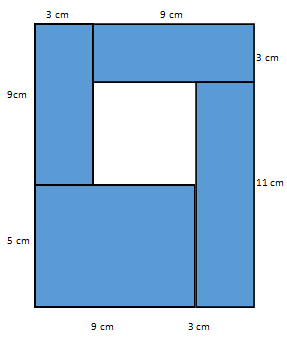
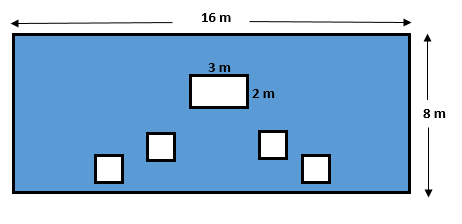
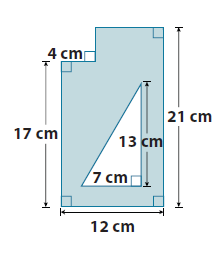
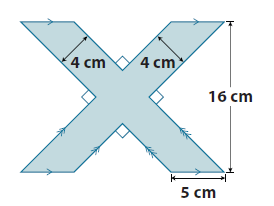
Find the area of the shaded region.

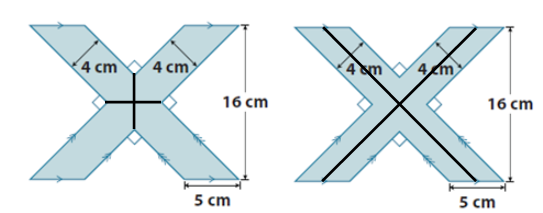
Redraw the figure separating the triangles; then, label the lengths discussing the calculations.

Exercise 3

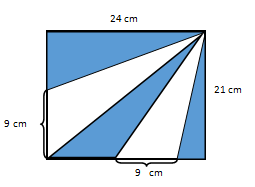
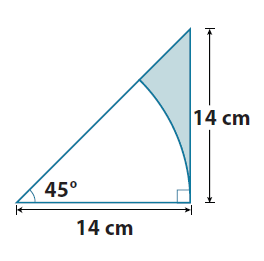
Find the area of the shaded region. The figure is not drawn to scale.

Problem Set

1. ****Find the area of the shaded region. Use for.
2. ****The figure shows two semicircles. Find the area of the shaded region. Use for
3. ****The figure shows a semicircle and a square. Find the area of the shaded region. Use for
4. ****The figure shows two semicircles and a quarter of a circle. Find the area of the shaded region. Use for.
5. ****Jillian is making a paper flower motif for an art project. The flower she is making has four petals; each petal is formed by three semicircles as shown below. What is the area of the paper flower? Provide your answer in terms of .
6. The figure is formed by five rectangles. Find the area of the unshaded rectangular region.
7. The smaller squares in the shaded region each have side lengths of . Find the area of the shaded region.
8. ****Find the area of the shaded region.
   1. ****Find the area of the shaded region.
   2. Draw two ways the figure above can be divided in four equal parts.

****

* 1. What is the area of one of the parts in (b)?

1. The figure is a rectangle made out of triangles. Find the area of the shaded region.
2. The figure consists of a right triangle and an eighth of a circle. Find the area of the shaded region. Use for