

Strand	Measurement
Sub Strand	Composite Areas
Content Learning Outcome	-Analyze and apply appropriate metric units and formulas to calculate length, perimeter, area of 2D shapes

### Lesson Notes

-The **perimeter** is the length of the outline of a shape. To find the **perimeter** of a rectangle or square you have to add the lengths of all the four sides.  $x$  is in this case the length of the rectangle while  $y$  is the width of the rectangle. **Perimeter** is the distance around the edge of a shape.

-The area is measurement of the surface of a shape. The **area of composite shapes** is the **area** that is covered by any **composite** shape. The **composite** shape is a shape in which few polygons are put together to form a required shape. Basically, a **composite** shape is made up of basic shapes put together. It is also called a "**composite**" or "complex" shape. To calculate the **area** of a **composite shape** you must divide the **shape** into rectangles, triangles or other **shapes** you can find the **area** of and then add the **areas** back together.

Example: 12cm



$$\text{Perimeter} = 8 + 12 + 10 + 3 + 2 + 9 = \underline{\underline{44\text{cm}}}$$

#### Composite Area

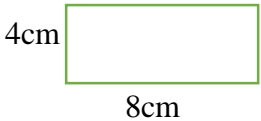
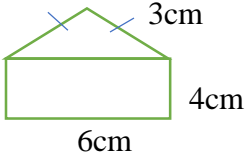
Step 1: Split up the composite shape into simpler shapes.

Step 2: Find the area of the simpler shapes.

Step 3: Add the areas to get the of composite shape.

$$\begin{array}{lll} A_1 = L \times W & A_2 = L \times W & A_T = A_1 + A_2 \\ = 8 \times 9 & = 10 \times 3 & = 72 + 30 \\ = \underline{\underline{72\text{cm}^2}} & = \underline{\underline{30\text{cm}^2}} & = \underline{\underline{102\text{cm}^2}} \end{array}$$

### Questions

Question	Working & Answer
1. Calculate the perimeter and area of the shape below. 	
2. Calculate the perimeter and area of Mr. Lal's square garden with a length of 8m.	
3. Calculate the perimeter of the composite shape below. 	
4. Calculate the area of the composite shape below. 