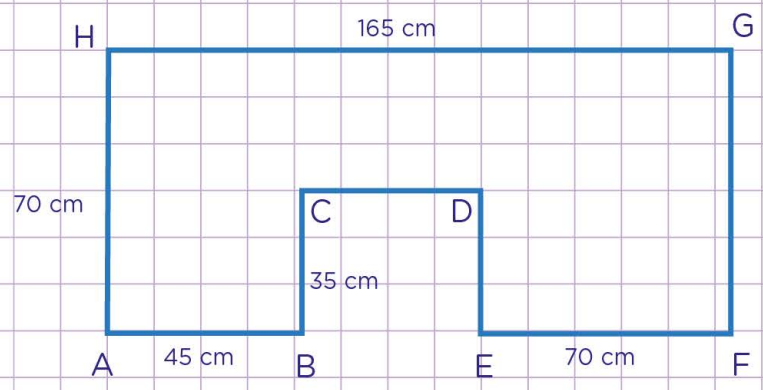
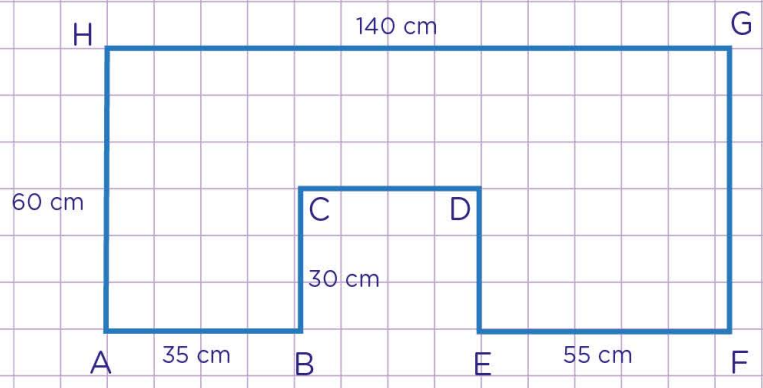
Name: ..... Class: .....

Area of compound figures.

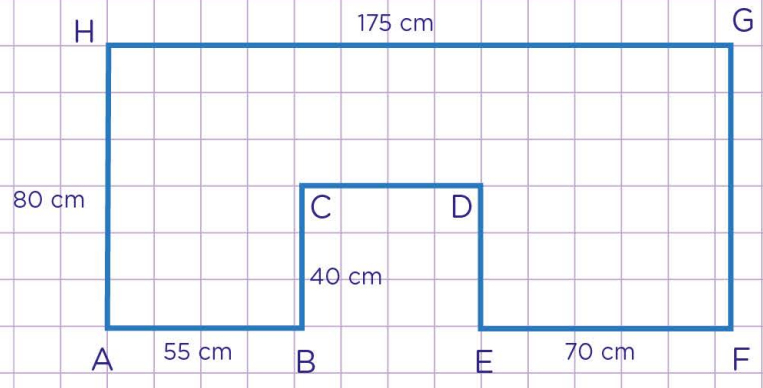
1. What is the area of this figure?



2. What is the area of this figure?



3. What is the area of this figure?

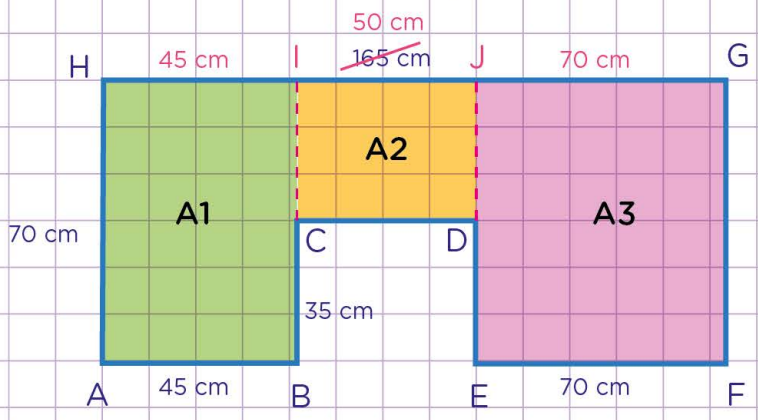


Solution

Name: ..... Class: .....

Area of compound figures.

1. What is the area of this figure?

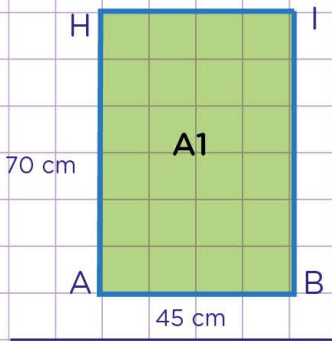


Let's divide the figure into seperate rectangles and find the area of each rectangle. The table below shows the different shapes and their corresponding areas.

Shapes	Areas
rectangle 1 = ABIH	area 1 = A1
rectangle 2 = CDJI	area 2 = A2
rectangle 3 = EFGJ	area 3 = A3

Before we go any further, let's find the distance **IJ**.

Notice that, **IJ = CD**. And, **165 cm = HG = AF = AB + CD + EF** . So, **CD = 165 - (AB + EF) = 50 cm**



Remember that the formula is **Area = length x width.**

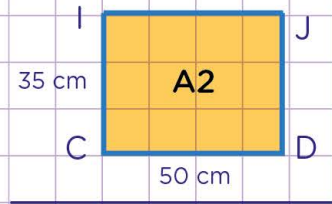
So, we will be using this formula throughout the exercise.

To solve A1.

A1 = AH x AB

= 70 x 45

= 3,150 cm²

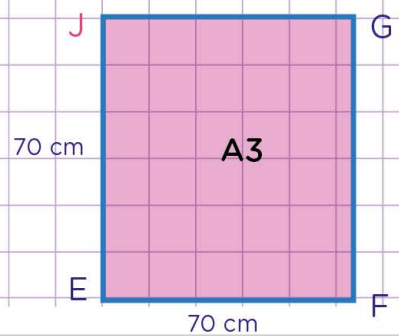


Next, we solve A2.

A2 = CI x CD

= 35 x 50

= 1,750 cm²



Finally, we solve A3.

A3 = EJ x EF

=70 x 70

= 4,900 cm²

Now, we add all the areas to have the area of the compound figure. **3,150 + 1,750 + 4,900 = 9,800 cm²**

So the area is **9,800 cm²**