

In this section, usually two types of problems are asked. Let us explain them briefly.

- A simple figure (X) is provided. This figure (X) is embedded in any one of the four alternative complex figures. A student is required to identify such alternative.
- A complex figure (X) is provided. This figure embeds any one of the option simple figures. A student is required to identify such option.

## EXAMPLE

1. A figure (X) is given below. Choose a figure from the four options that exactly embeds the figure (X).



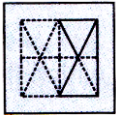
Figure (X)



### Explanation (c):

Figure (c) embeds the figure (X).

Look at below:



So, the correct option is (c).

## Figure Formation

This section deals with the following types of problems:

- I. **Formation of a Figure from its Segments:** In such type of problems, all the parts to form a figure are given. A student is required to identify the figure so formed out of the four options.
- II. **Choosing a Pattern which has the same components as a given pattern:** In such type of problems, a pattern of several components is given. A pattern out of four options contains the same components. A student is required to choose such pattern.

2. Which of the figures (a), (b), (c) and (d) can be formed from the pieces given in Fig. (X)?



Fig. (X)



**Explanation (d):** Only figure (d) can be formed from the pieces given in Fig. (X).

3. Select from the options in which the specified components of the given Fig. (X) are found.

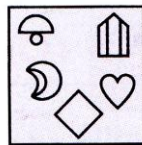
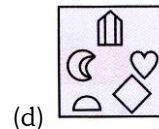
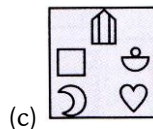
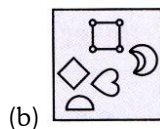
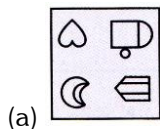


Fig. (X)



**Explanation (a):**

Figure (a) consists of all the components of figure (X).

**Construction of Squares**

Such type of problems are on the basis of the geometrical figures.

A group of some geometrical figures is provided.

A student is required to identify that members of the group which can fit into each other to form a square.

4. Select a figure from the given options which fits exactly into Fig. (X) to form a complete square.

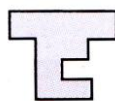
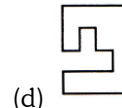
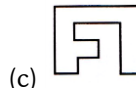
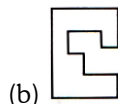
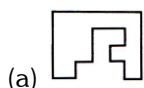


Fig. (X)



**Explanation (c):**

Rotate figure (c) through  $180^\circ$  and then fit into Fig. (X) to obtain the following square.



So, the correct option is (c).

**Grouping of Identical Figures**

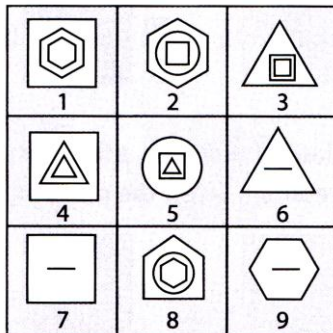
In such type of problems a set of some figures is given.

Usually these are four, six or nine in counting.

These figures are numbered as 1, 2, 3, 4,.....

A candidate is required to classify these figures into groups on the basis of some common properties amongst them.

5. Group the following figures into three classes regarding common properties amongst them.



- (a) 1, 1, 3; 4, 5, 6; 7, 8, 9  
 (b) 1, 3, 4; 5, 7, 8; 1, 6, 9  
 (c) 2, 4, 7; 5, 8, 9; 1, 3, 6  
 (d) 2, 5, 8; 1, 3, 4; 6, 7, 9

**Explanation (d):**

1, 5, 8 contain three different figures;  
 1, 3, 4 contain two similar figures;  
 6, 7, 9 contain a line segment.