

# Paper Folding and Cutting

## REASONING WORKBOOK

### PAPER FOLDING

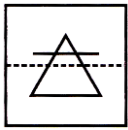
In such type of problems, a transparent sheet with a pattern and a dotted line on it is given. A student is required to choose a figure from given alternatives that would appear like that pattern which visualizes when the transparent sheet is folded along the given dotted line.

### PAPER CUTTING

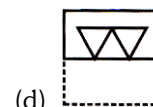
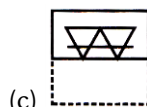
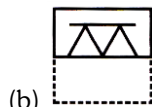
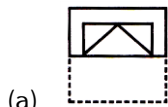
In such type of problems, a paper is folded once or more than once and then a cut is made on it. Then the paper is unfolded absolutely. A student is required to select a figure from the given alternatives that would appear like the pattern as on the unfolded paper.

## EXAMPLE

1. You are given a transparent sheet with a pattern on it. If this sheet is folded along the dotted line, then which type of pattern would appear?



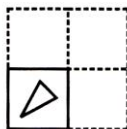
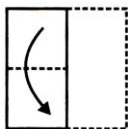
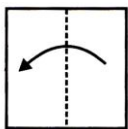
Transparent Sheet



**Explanation (c):**

It is clear that the lower half of the sheet is folded over the upper half. The resultant design would be the combination of the design in upper half and the water image of the design in the lower half.

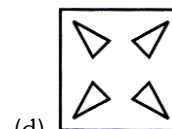
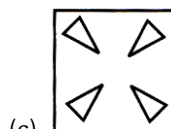
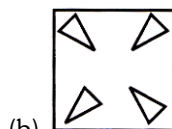
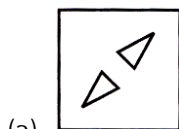
2. The three figures (i), (ii) and (iii) shows a sequence of folding a sheet of paper. Figure (iii) shows the manner in which the folded paper has been cut out. If then the sheet is unfolded, which of the option figures (a), (b), (c), (d) would show the unfolded form?



(i)

(ii)

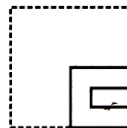
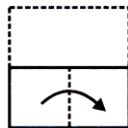
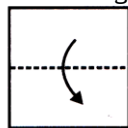
(iii)



**Explanation (d):**

In figure (i) the right half of the sheet is put over the left half. In figure (ii), the upper half of the sheet is put over the lower half of the sheet to form a quarter. In the third figure, a triangle is punched out. Consequently the triangle will be created in each quarter of the sheet. In the upper half of the unfolded sheet, the two punched triangles have a horizontal line of symmetry (as a mirror). The same is for left and right halves of the sheet.

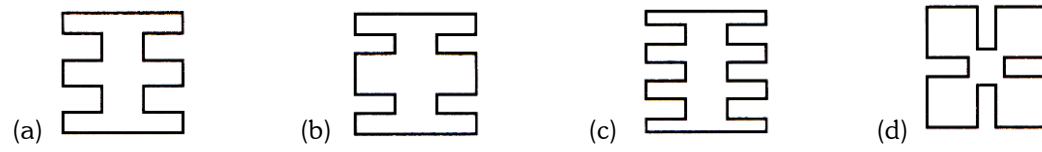
3. A set of three figures (i), (ii), (iii) is showing a sequence of folding of a piece of paper. Fig. (iii) shows the manner in which the folded paper has been cut. The three figures are followed by four answer figures from which you have to choose a figure which would most closely resemble the unfolded form of fig. (iii).



(i)

(ii)

(iii)



**Explanation (b):**

Square sheet in (i) is folded downwards in half and then again right in half.  
In third stage punch the shape as shown.