

## CHAPTER – 13

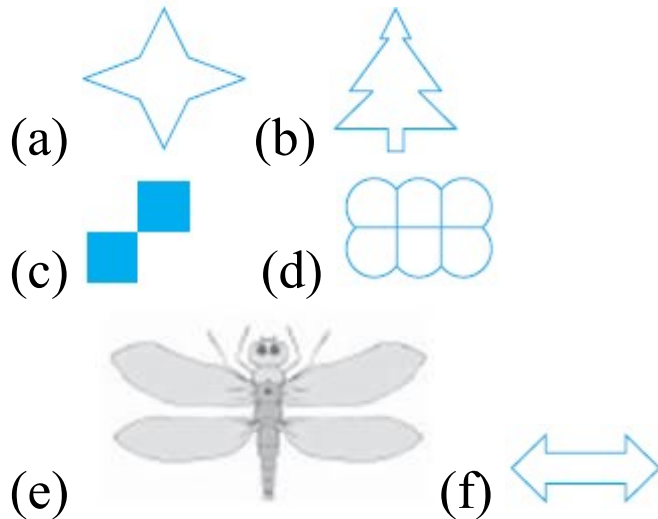
### Symmetry

#### EXERCISE – 13.3

##### Q. 1

Find the number of lines of symmetry in each of the following shapes:

How will you check your answer?



Answer:

(a) From the above given figure, it is clearly observed that,

There are 4 lines of symmetry in the given figure and it can be drawn as follows:



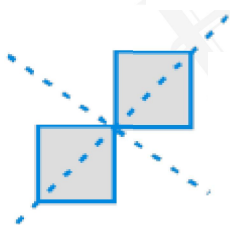
(b) From the above given figure, it is clearly observed that,

There is only 1 line of symmetry in the given figure and it can be drawn as follows:



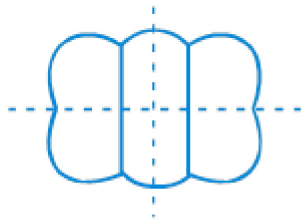
(c) From the above given figure, it is clearly observed that,

There are 2 lines of symmetry in the given figure and it can be drawn as follows:



(d) From the above given figure, it is clearly observed that,

There are 2 lines of symmetry in the given figure and it can be drawn as follows:



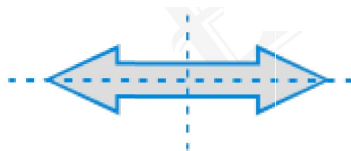
(e) From the above given figure, it is clearly observed that,

There is only 1 line of symmetry in the given figure and it can be drawn as follows:



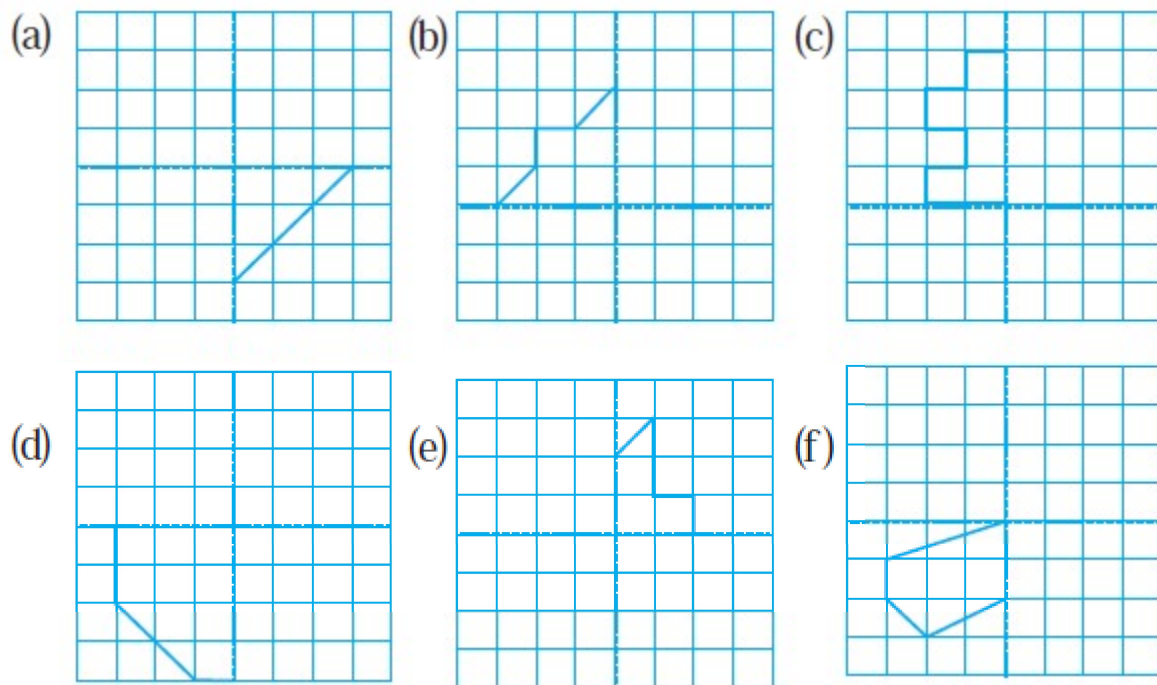
(f) From the above given figure, it is clearly observed that,

There are 2 lines of symmetry in the given figure and it can be drawn as follows:



## Q. 2

Copy the following drawing on squared paper. Complete each one of them such that the resulting figure has two dotted lines as two lines of symmetry:



How did you go about completing the picture?

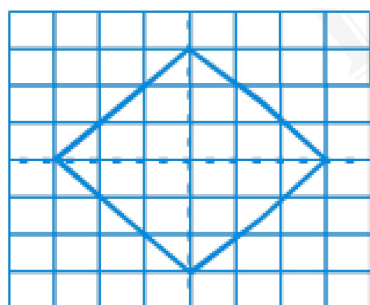
Answer:

(a) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

Therefore,

The above given figure can be completed as follows:

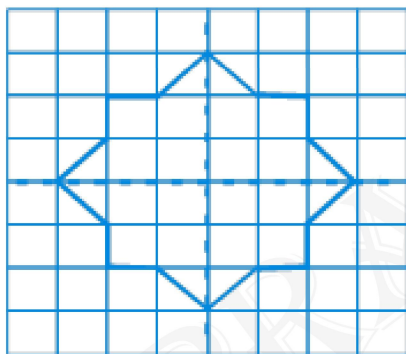


(b) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

Therefore,

The above given figure can be completed as follows:

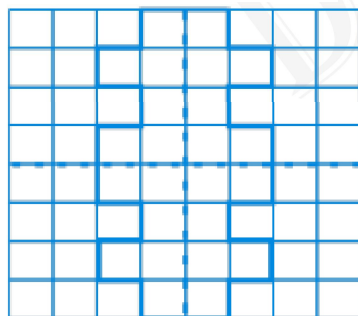


(c) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

Therefore,

The above given figure can be completed as follows:

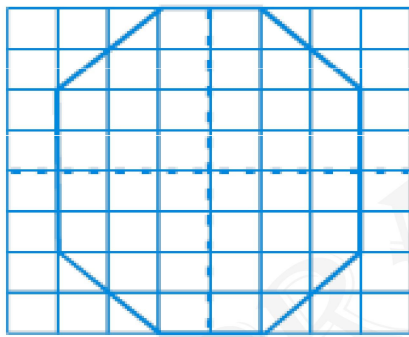


(d) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

Therefore,

The above given figure can be completed as follows:

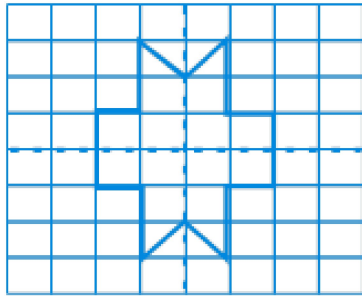


(e) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

Therefore,

The above given figure can be completed as follows:

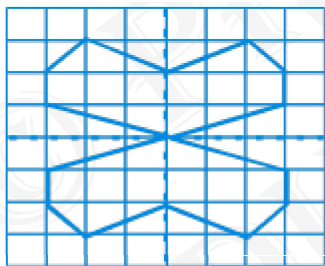


(f) The above given figure can be completed by drawing the same parts as shown in the given figure

We can draw this by drawing horizontal and vertical line of symmetry

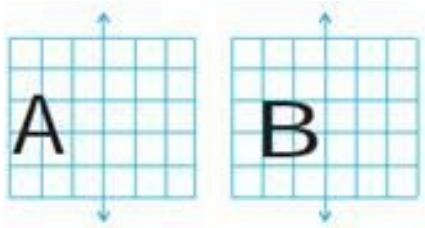
Therefore,

The above given figure can be completed as follows:



Q. 3

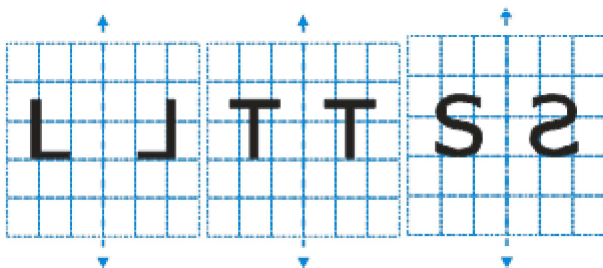
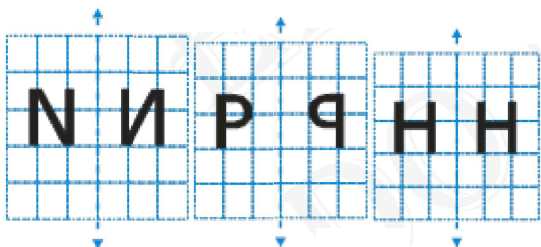
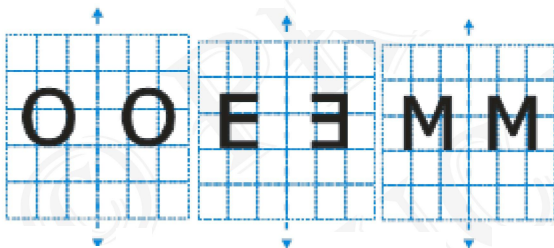
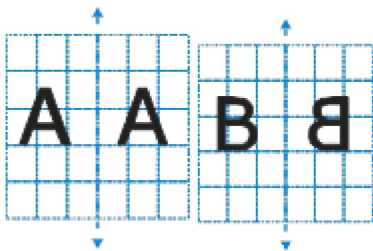
In each figure alongside, a letter of the alphabet is shown along with a vertical line. Take the mirror image of the letter in the given line. Find which letters look the same after reflection (i.e. which letters look the same in the image) and which do not. Can you guess why?



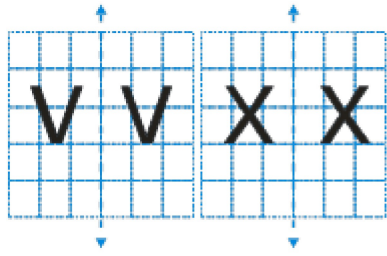
Try For OEMNPHLTSVX

Answer:

Mirror image for above given figures is as follows:







From the above drawn figures, we have

Figures having vertical line of symmetry will have same mirror images and these are:

O, M, H, T, V, X

Thus, these letters will look the same