


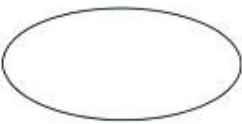


Chapter 11: Symmetry**Level 1****Exercise 1**

1. Fill in the blanks with the appropriate words.
 - (a) When we draw a line in a figure and the line divides the figure into equal halves that fit exactly, this line is called the line of _____.
 - (b) The two _____ halves must fit exactly.
 - (c) This figure is then a _____ figure.
2. Which of the following shapes are symmetric figures? Tick (✓) the symmetric ones in the boxes provided.

(a)  <input data-bbox="738 1493 829 1581" type="checkbox"/>	(b)  <input data-bbox="1242 1493 1333 1581" type="checkbox"/>
(c)  <input data-bbox="738 1753 829 1841" type="checkbox"/>	(d)  <input data-bbox="1242 1753 1333 1841" type="checkbox"/>

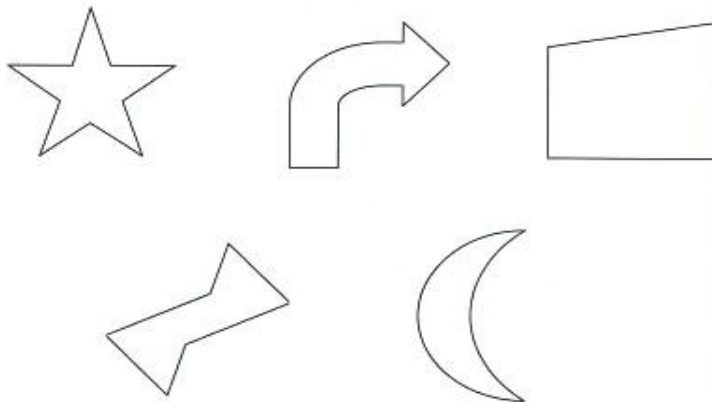
3. Which of the letters below are symmetric? Circle them.



4. Which of the symbols are symmetric? Circle them.



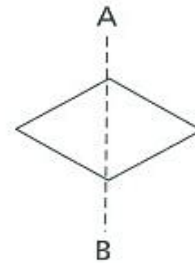
5. Which of the figures are not symmetric? Circle them.



6. In each of the diagrams below, a dotted line is drawn to divide the figure into two halves. Study the diagrams and circle the correct words in the brackets.

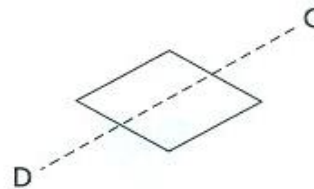
- (a) The two halves (do not fit / fit) exactly.

Line AB (is / is not) a line of symmetry.



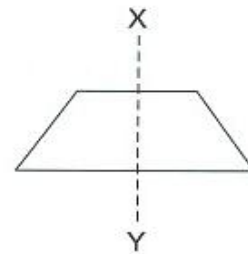
- (b) The two halves (do not fit / fit) exactly.

Line CD (is / is not) a line of symmetry.



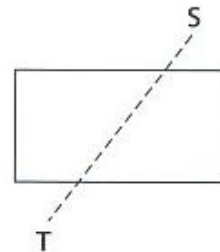
- (c) The two halves (do not fit / fit) exactly.

Line XY (is / is not) a line of symmetry.

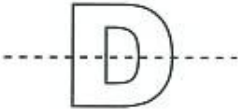
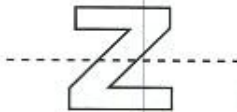




- (d) The two halves (do not fit / fit) exactly.

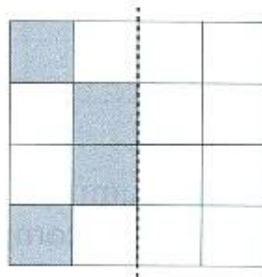
Line ST (is / is not) a line of symmetry.



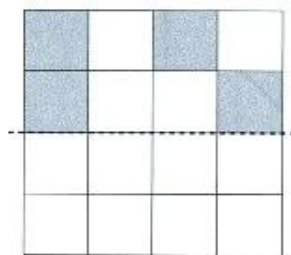
7. In each of the following letters, is the dotted line a line of symmetry? Tick (✓) the symmetric ones in the boxes provided.

<p>(a)</p>  <input data-bbox="699 588 792 674" type="checkbox"/>	<p>(b)</p>  <input data-bbox="1214 588 1307 674" type="checkbox"/>
<p>(c)</p>  <input data-bbox="699 846 792 932" type="checkbox"/>	<p>(d)</p>  <input data-bbox="1214 846 1307 932" type="checkbox"/>

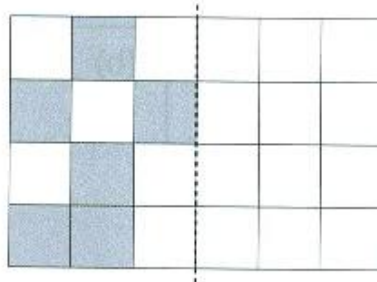
8. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.



9. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.

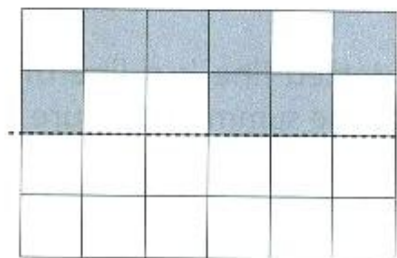


10. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.

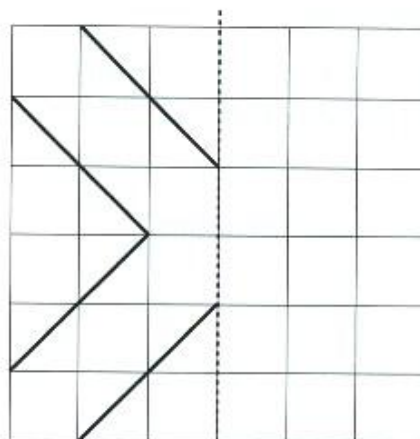


Exercise 2

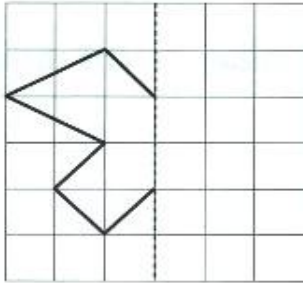
1. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.



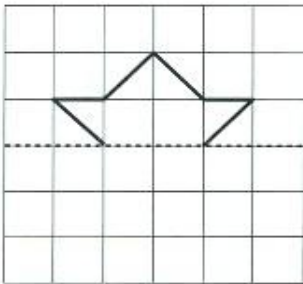
2. The figure below is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



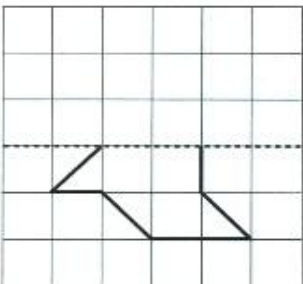
3. The figure shown is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



4. The figure shown is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



5. The figure shown is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



Level 2

Exercise 1

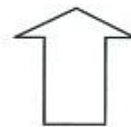
Choose the correct answer and write its number in the brackets provided.

1. Which of the figures is symmetric?

(1)



(2)



(3)



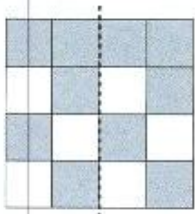
(4)



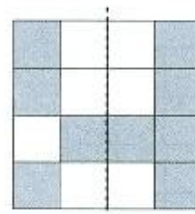
()

2. Which of the figures is symmetric about the dotted line?

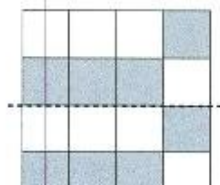
(1)



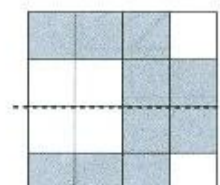
(2)



(3)

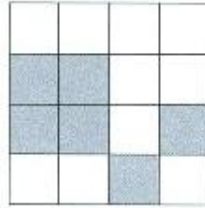


(4)



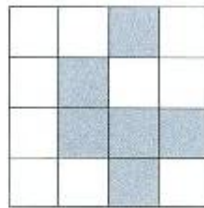
()

3. What is the minimum number of squares that must be shaded to make the figure symmetric?



- (1) 1 (2) 2
(3) 3 (4) 4 ()

4. What is the minimum number of squares that must be shaded to make the figure symmetric?



- (1) 1 (2) 2
(3) 3 (4) 4 ()

5. Which of the following letters has a vertical line of symmetry?

- (1) B (2) E
(3) C (4) W

()

6. Which of the following letters has a horizontal line of symmetry?

(1)

A

(2)

V

(3)

X

(4)

T

()

7. Which of the following words has a horizontal line of symmetry?

(1)

BOX

(2)

CUT

(3)

DIM

(4)

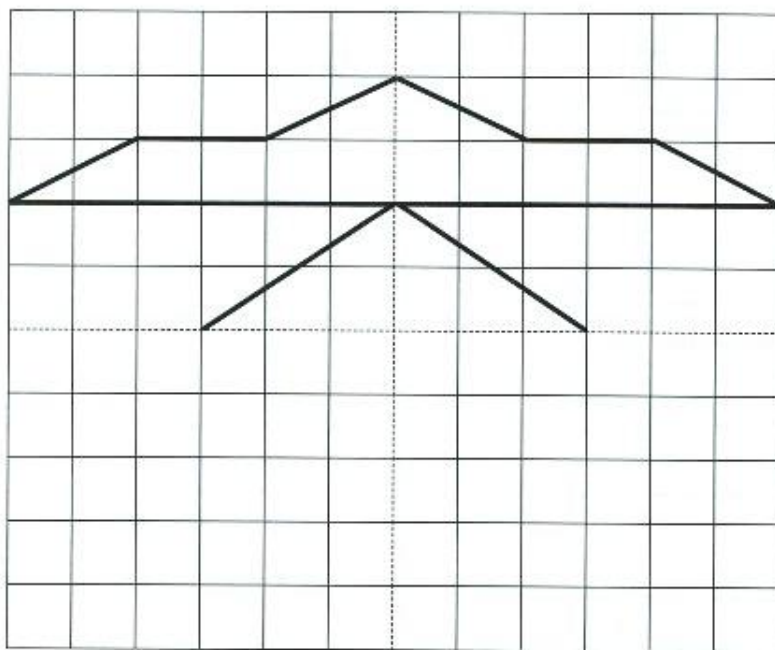
HEY

()

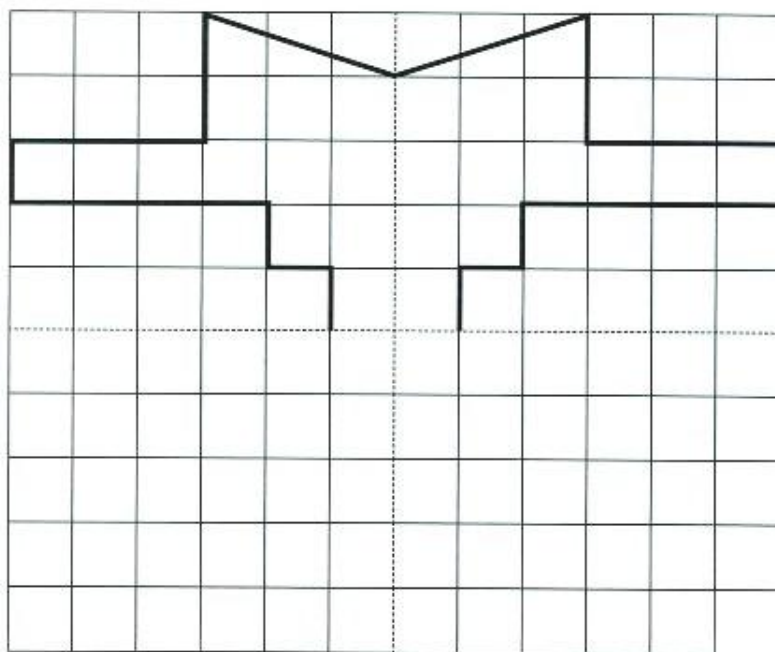
Exercise 2

For questions 1 to 5, complete the symmetric figure with the dotted lines as the lines of symmetry.

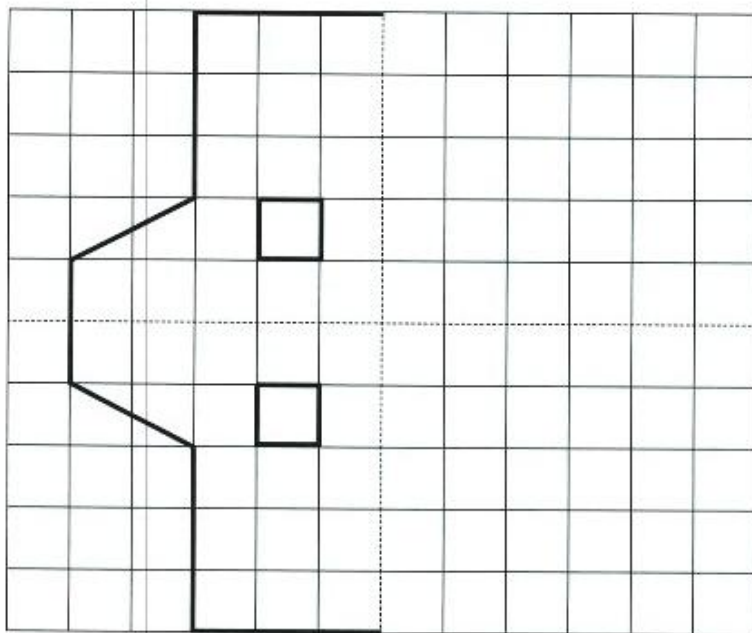
1.



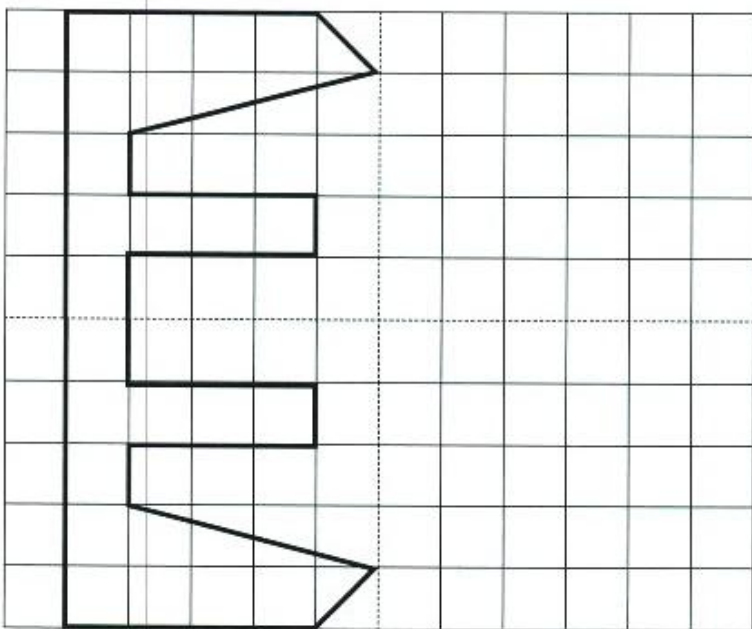
2.

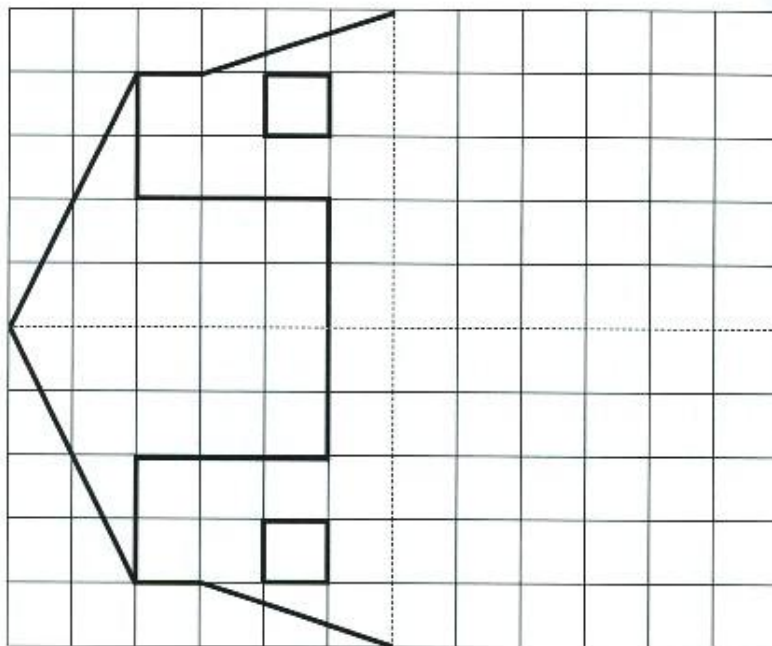


3.



4.



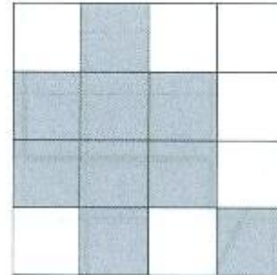


Level 3

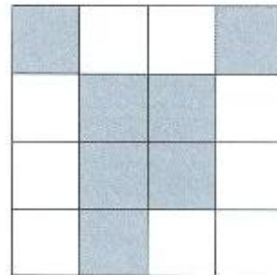
Exercise 1

For questions 1 to 10, the lines of symmetry are either horizontal or vertical.

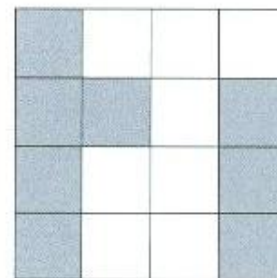
1. The figure shown is not symmetric. Shade **one** more square to make it symmetric.



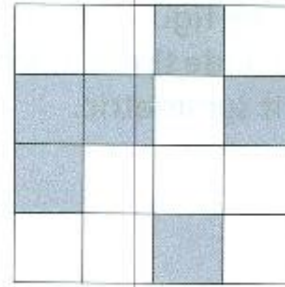
2. The figure shown is not symmetric. Shade **one** more square to make it symmetrical.



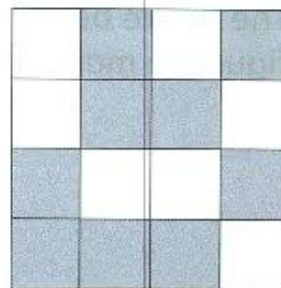
3. The figure shown is not symmetric. Shade **two** more squares to make it symmetric.



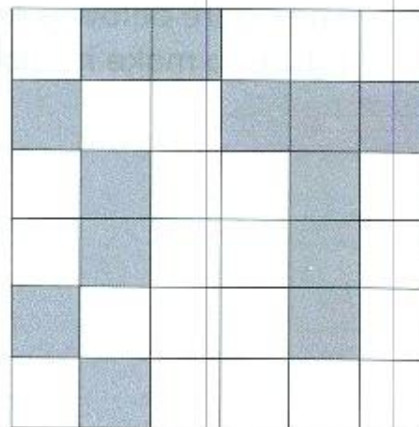
4. The figure shown is not symmetric. Shade **two** more squares to make it symmetric.



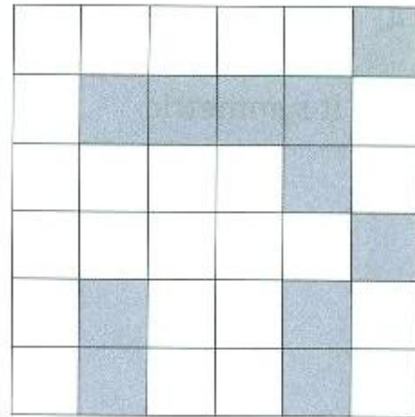
5. The figure shown is not symmetric. Shade **three** more squares to make it symmetric.



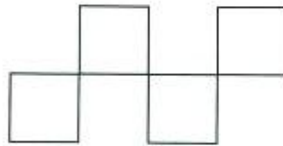
6. The figure shown is not symmetric. Shade **three** more squares to make it symmetric.



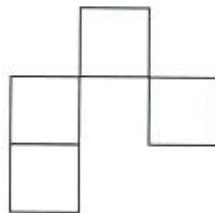
7. The figure shown is not symmetric. Shade **three** more squares to make it symmetric.



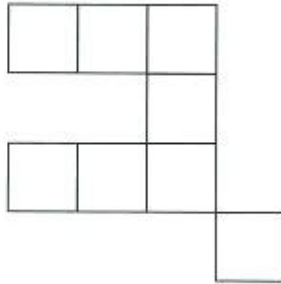
8. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



9. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



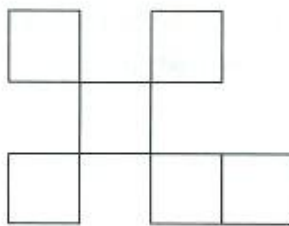
10. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



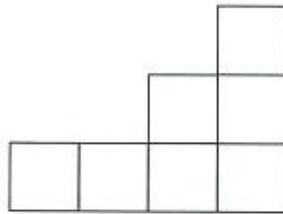
Exercise 2

For questions 1 to 10, the lines of symmetry are either horizontal or vertical.

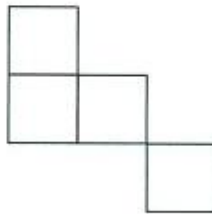
1. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



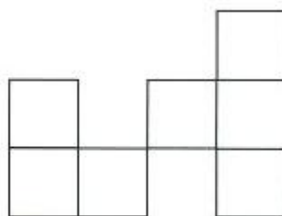
2. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



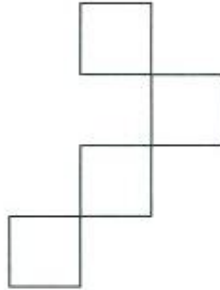
3. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



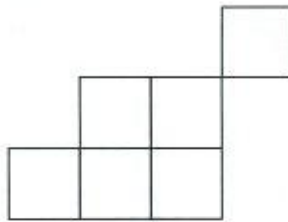
4. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



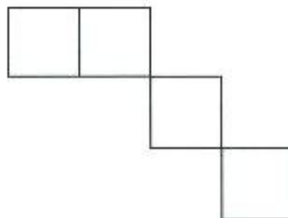
5. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



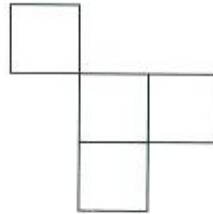
6. The figure below is not symmetric. Think of **two** possible ways of drawing **two** more squares to the figure to make it symmetric.



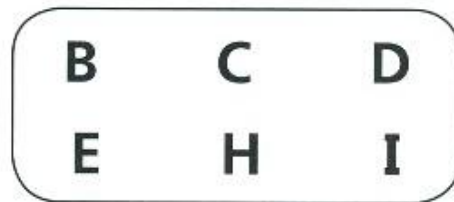
7. The figure below is not symmetric. Think of **two** possible ways of drawing **two** more squares to the figure to make it symmetric.



8. The figure below is not symmetric. Think of **two** possible ways of drawing **two** more squares to the figure to make it symmetric.



9. Use the letters in the box to make **two** 3-letter words that have a horizontal line of symmetry. You can use the letters more than once.



10. Use the letters in the box to make **two** 3-letter words below that have a vertical line of symmetry at letter "U". You can use the letters more than once.

Y W V
T M H

