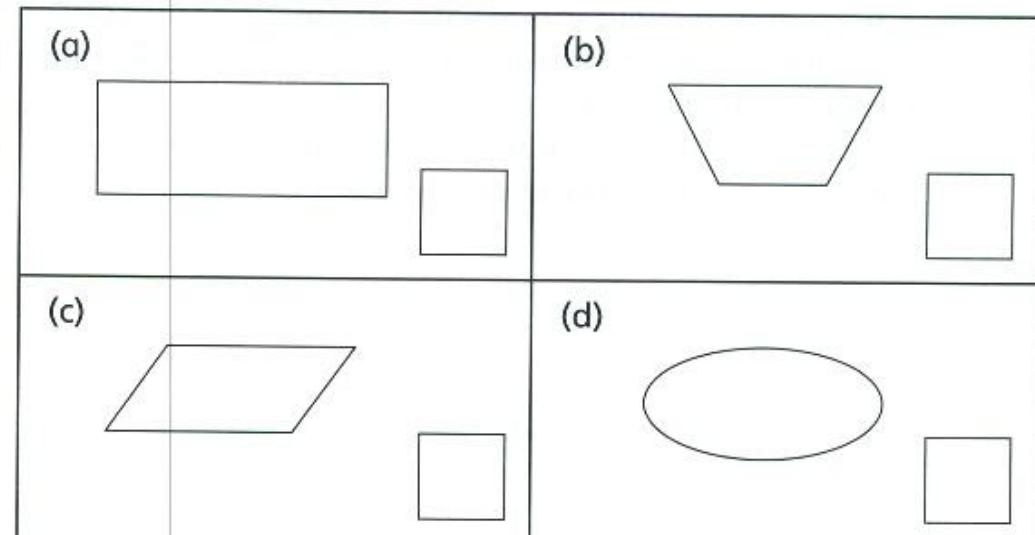


**Chapter 11: Symmetry****Exercise 1**

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.



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

F

X

H

Q

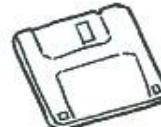
G

M

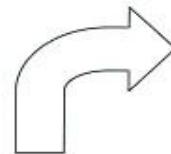
S

N

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



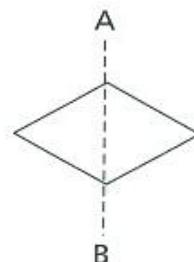
5. Which of the figures are not symmetric? Circle them.



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.

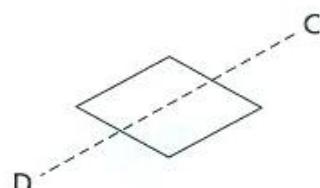
(a) The two halves (do not fit / fit) exactly.

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



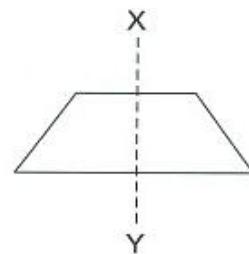
(b) The two halves (do not fit / fit) exactly.

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



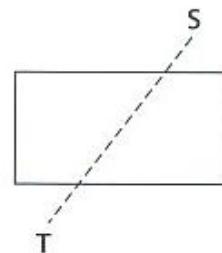
(c) The two halves (do not fit / fit) exactly.

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

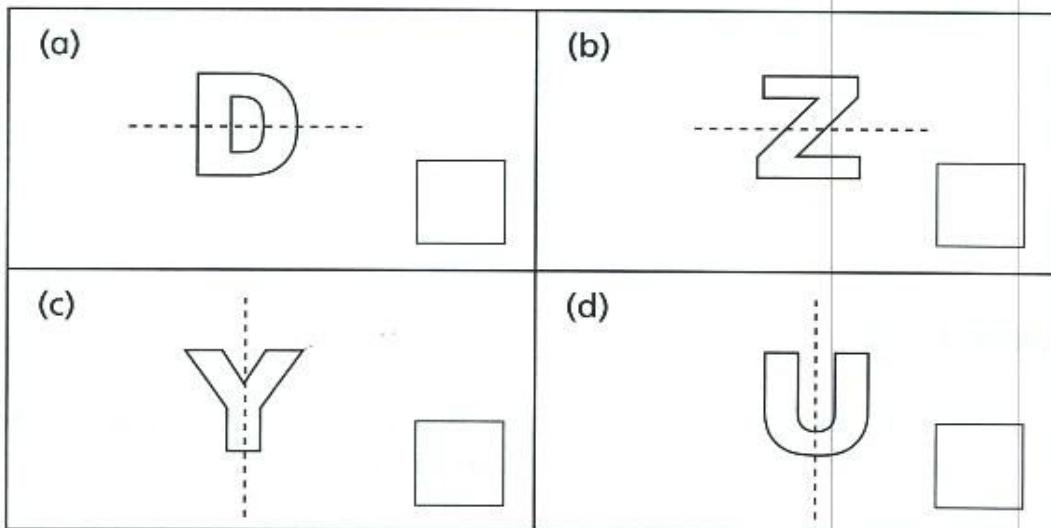


(d) The two halves (do not fit / fit) exactly.

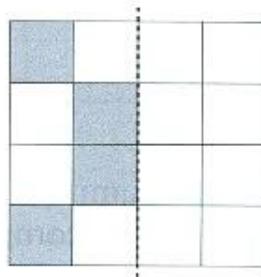
Line ST (is / is not) a line of symmetry.



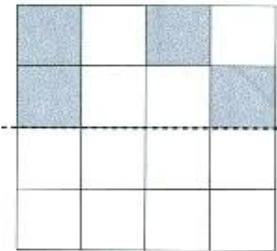
7. In each of the following letters, is the dotted line a line of symmetry? Tick (✓) the symmetric ones in the boxes provided.



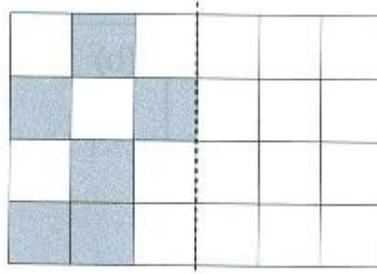
8. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.



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

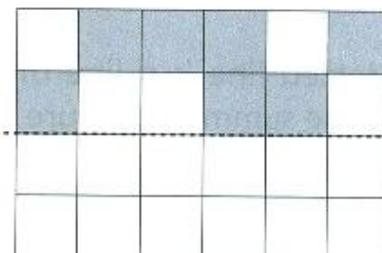


10. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.

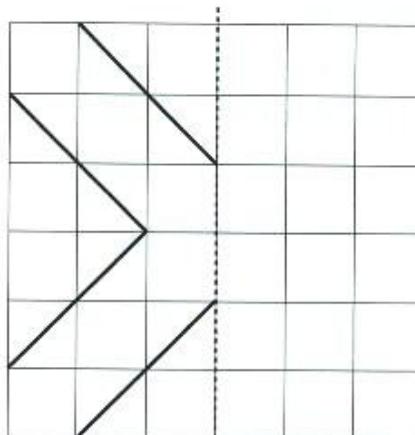


## Exercise 2

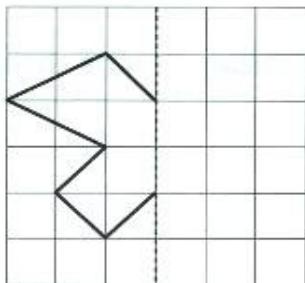
1. In the figure, the dotted line is a line of symmetry. Shade the squares to complete the symmetric figure.



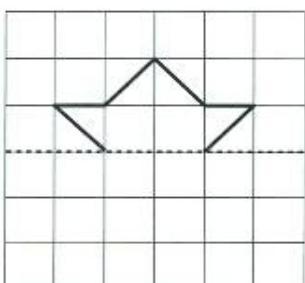
2. The figure below is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



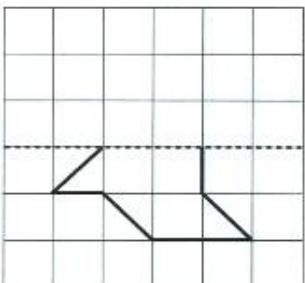
3. The figure shown is half of a symmetric figure. The dotted line is a line of symmetry. Draw lines to complete the symmetric figure.



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**

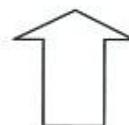
Choose the correct answer and write its number in the brackets provided.

1. Which of the figures is symmetric?

(1)



(2)



(3)



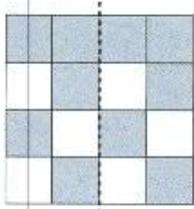
(4)



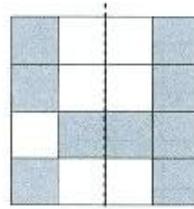
(      )

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

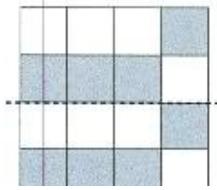
(1)



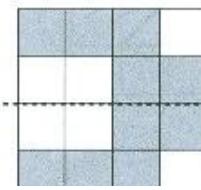
(2)



(3)

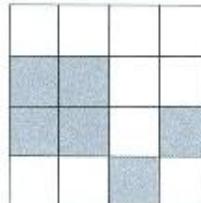


(4)



(      )

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



(1) 1

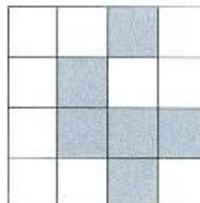
(3) 3

(2) 2

(4) 4

( )

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



(1) 1

(3) 3

(2) 2

(4) 4

( )

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

(1)



(2)



(3)



(4)



( )

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

(1)



(2)



(3)



(4)



(        )

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

(1)



(2)



(3)



(4)

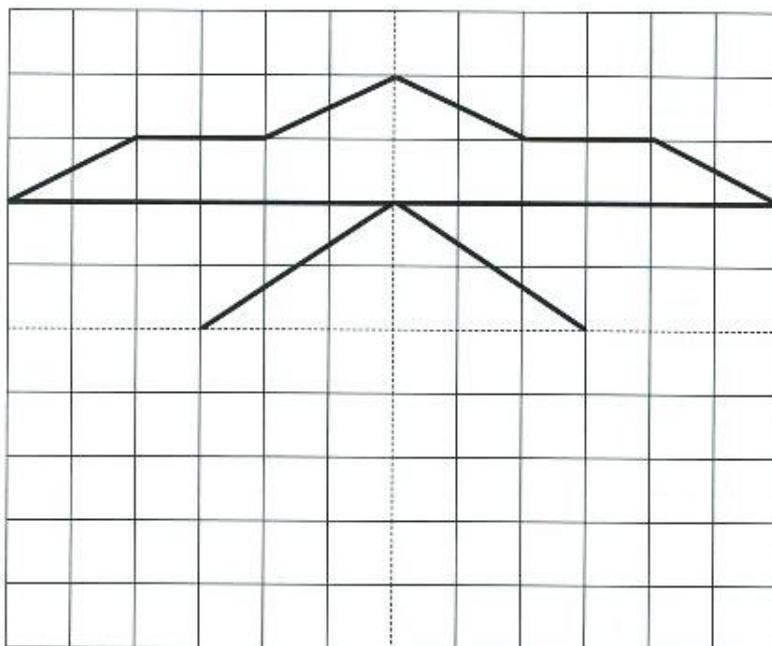


(        )

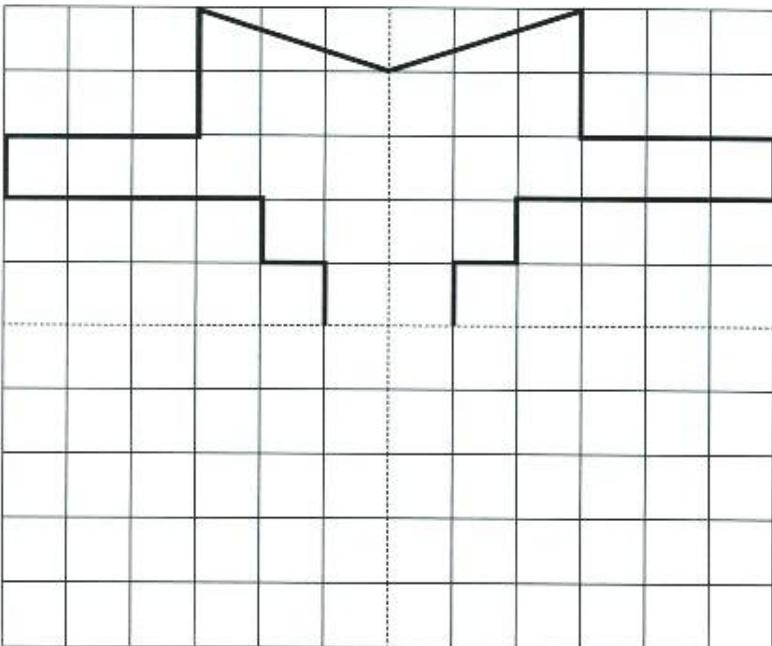
**Exercise 2**

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

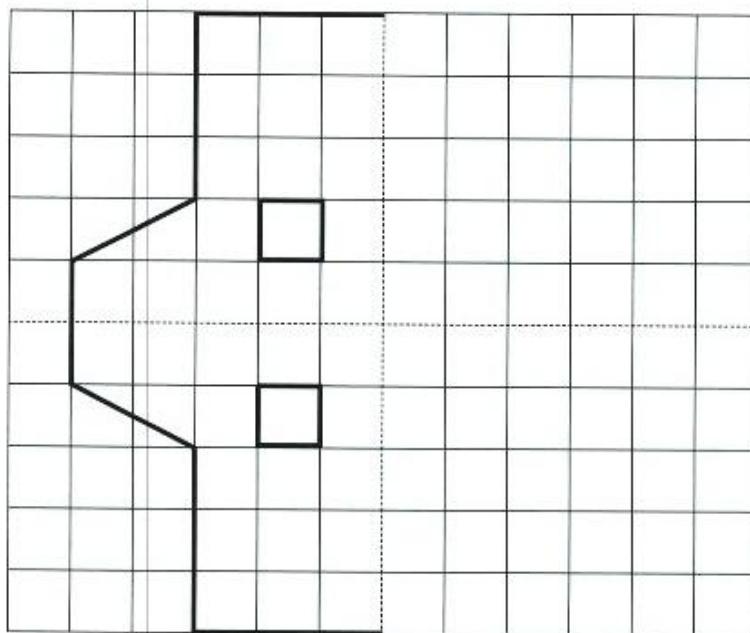
1.



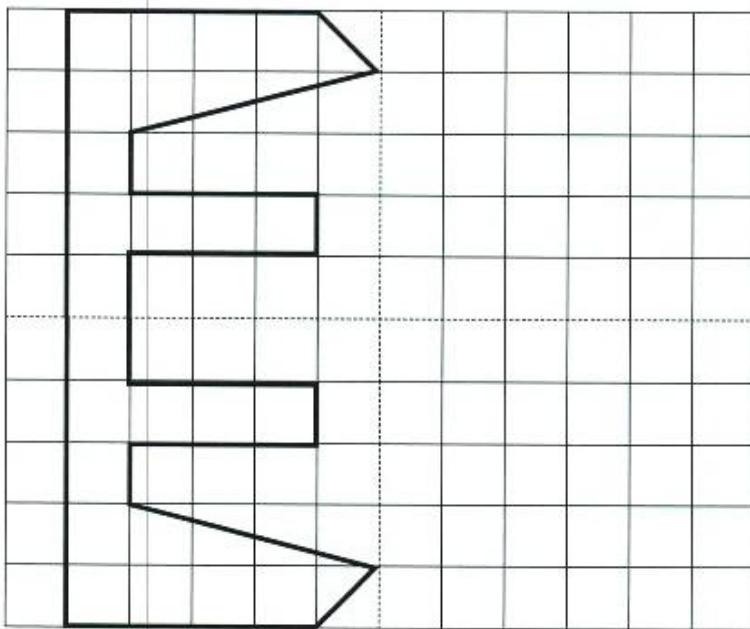
2.



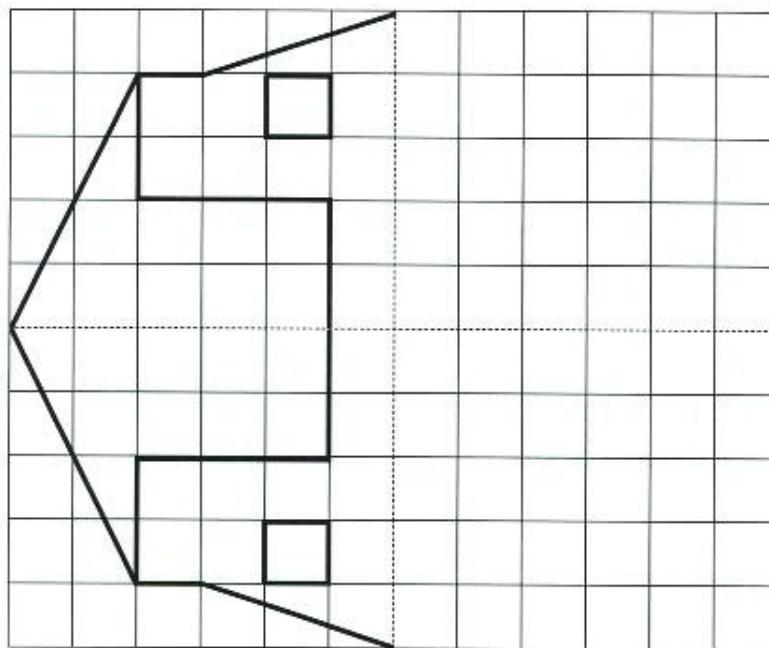
3.



4.



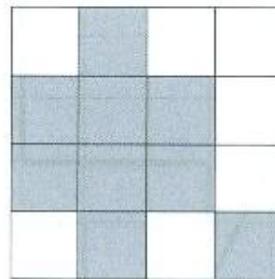
5.



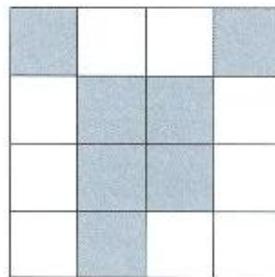
**Level 3****Exercise 1**

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

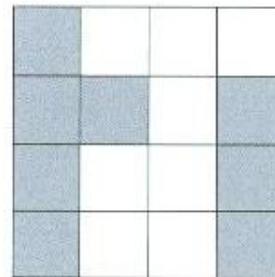
1. The figure shown is not symmetric. Shade **one** more square to make it symmetric.



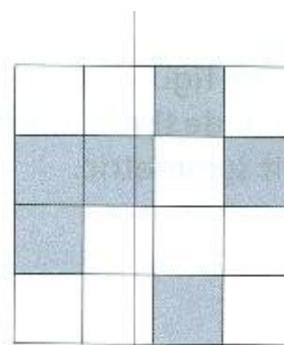
2. The figure shown is not symmetric. Shade **one** more square to make it symmetrical.



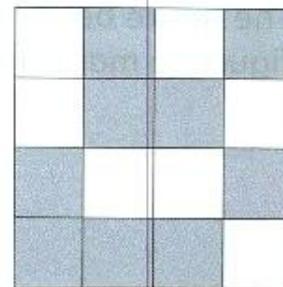
3. The figure shown is not symmetric. Shade **two** more squares to make it symmetric.



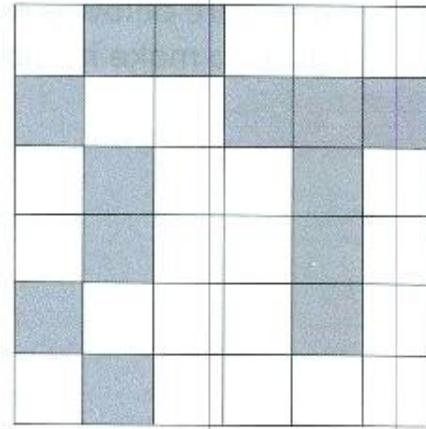
4. The figure shown is not symmetric. Shade **two** more squares to make it symmetric.



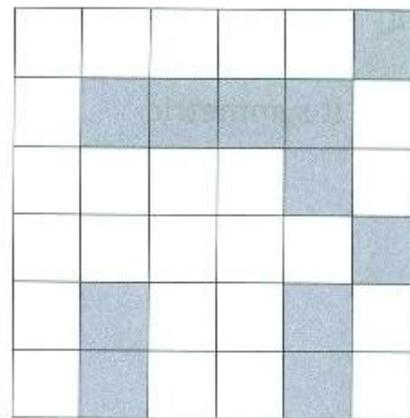
5. The figure shown is not symmetric. Shade **three** more squares to make it symmetric.



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



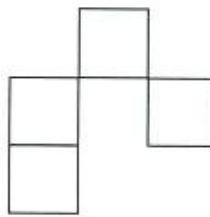
7. The figure shown is not symmetric. Shade **three** more squares to make it symmetric.



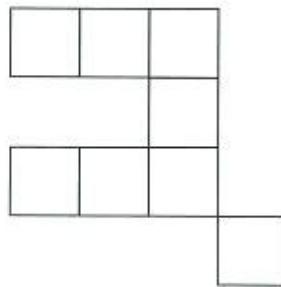
8. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



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



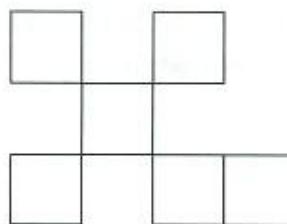
10. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



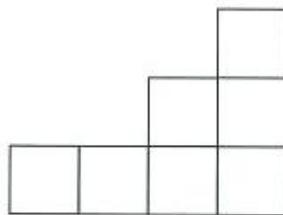
### Exercise 2

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

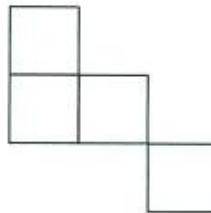
1. The figure below is not symmetric. Draw **one** more square to the figure to make it symmetric.



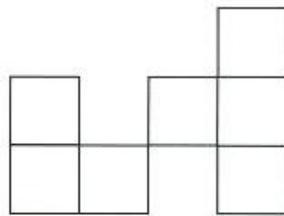
2. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



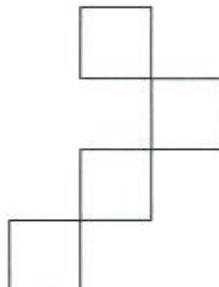
3. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



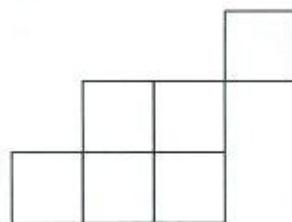
4. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



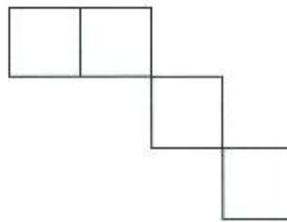
5. The figure below is not symmetric. Draw **two** more squares to the figure to make it symmetric.



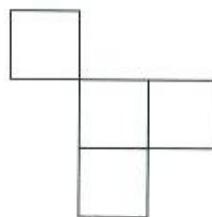
6. The figure below is not symmetric. Think of **two** possible ways of drawing **two** more squares to the figure to make it symmetric.



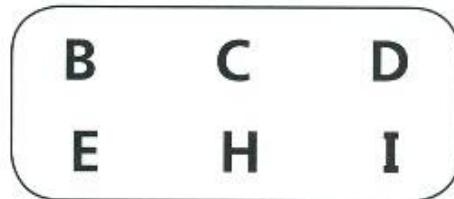
7. The figure below is not symmetric. Think of **two** possible ways of drawing **two** more squares to the figure to make it symmetric.



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

