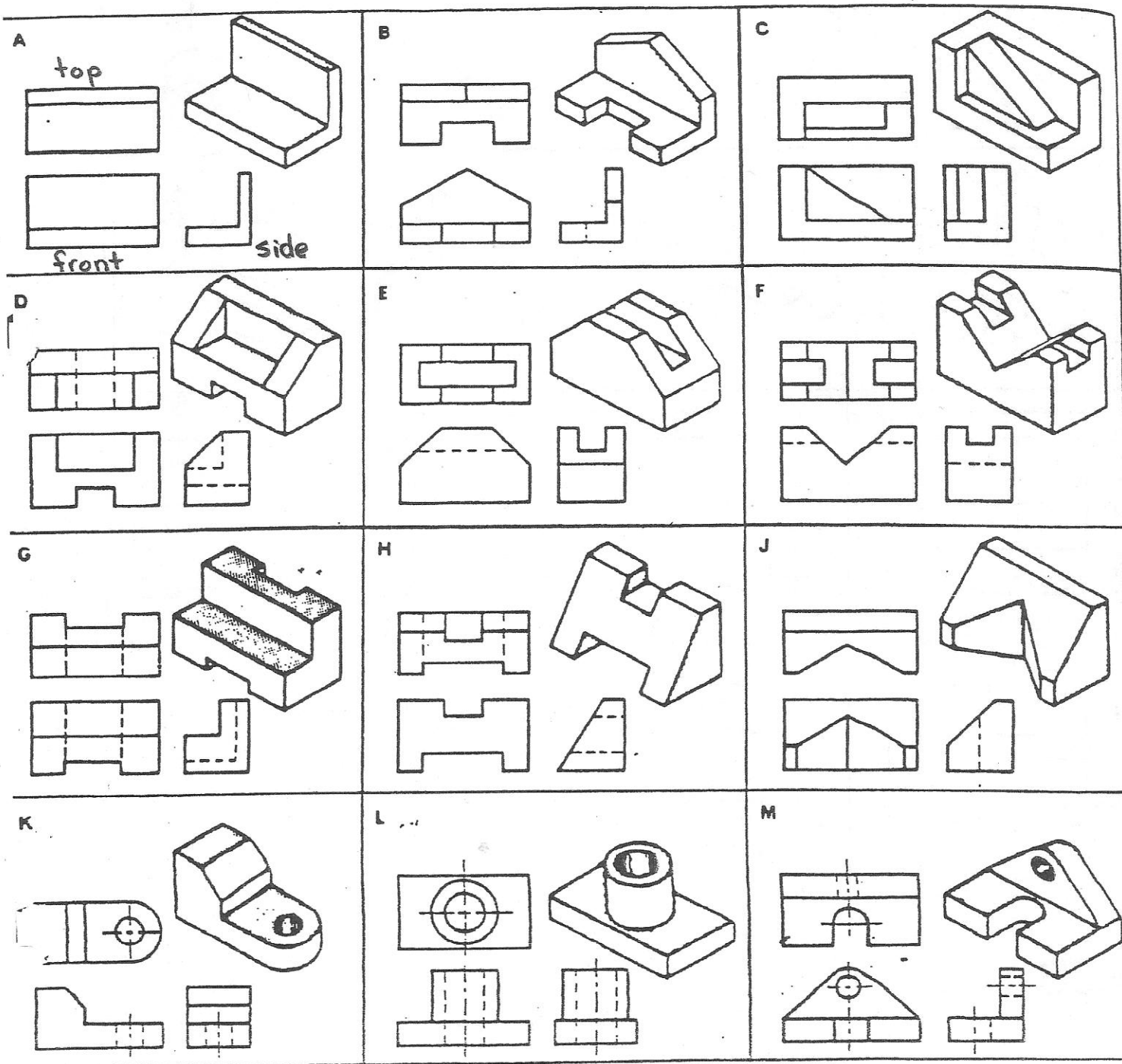
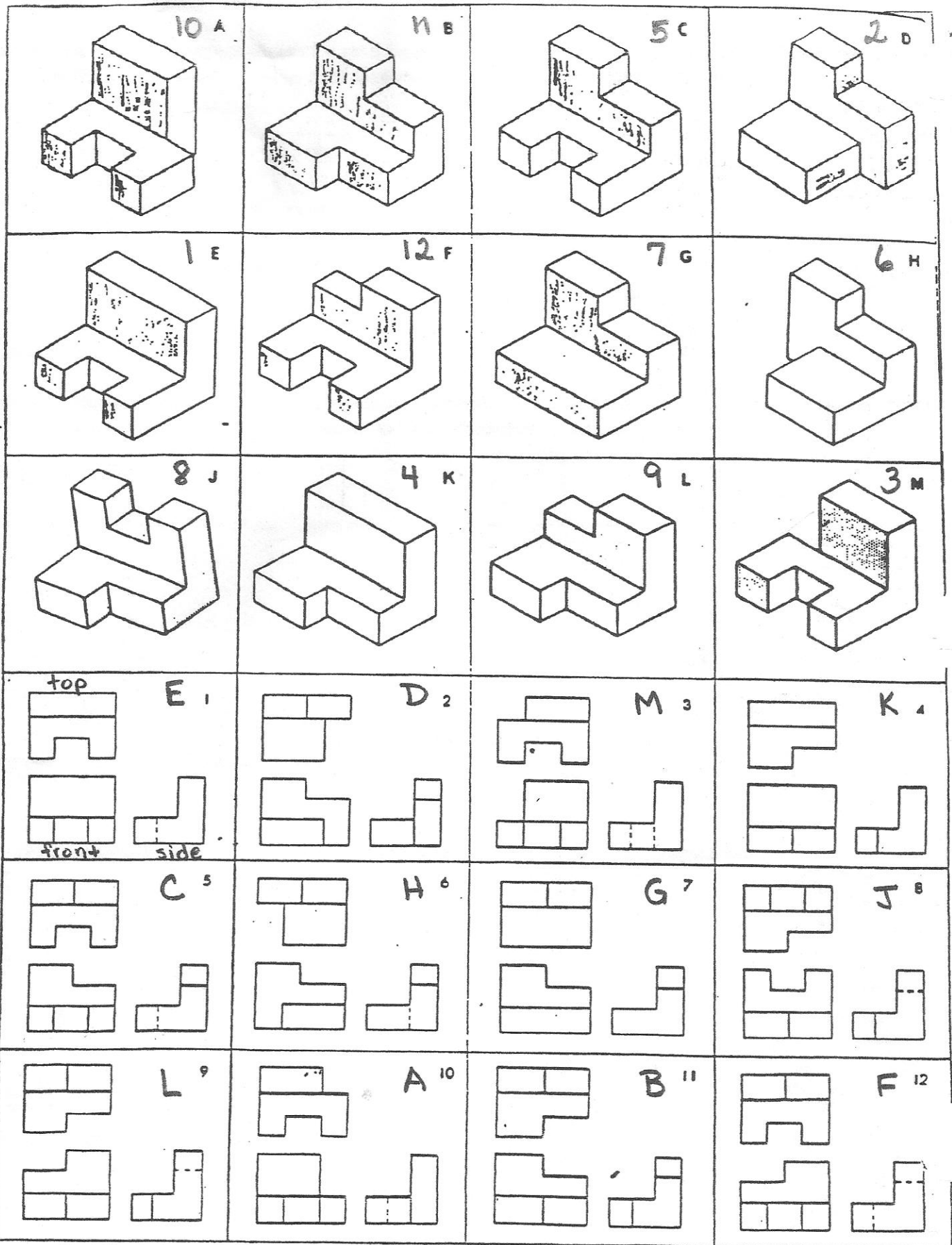


KEY

THE ILLUSTRATIONS BELOW SHOW A FIGURE AND ITS ORTHOGRAPHIC DRAWINGS. CLOCKWISE FROM THE UPPER RIGHT CORNER ARE THE FIGURE, ITS SIDE VIEW, ITS FRONT VIEW, AND ITS TOP VIEW. AFTER STUDYING EXAMPLES A THROUGH M CAREFULLY, WORK ON THE EXERCISES ON THE FOLLOWING PAGE.

INSTRUCTIONS: Match the pictorial drawings A - M to the corresponding orthographic drawings 1 - 12.

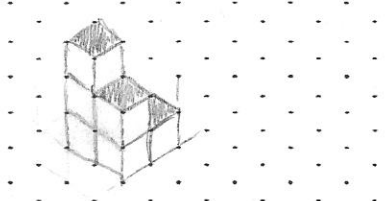
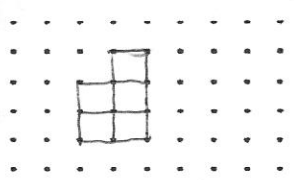
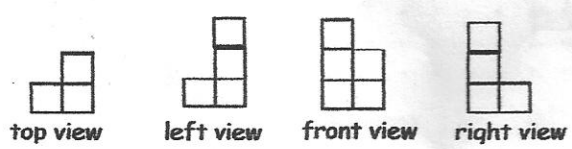




Match Pictorial Drawings A to M with Orthographic Drawings 1 to 12

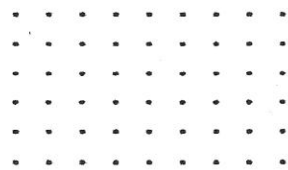
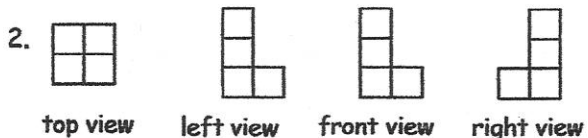
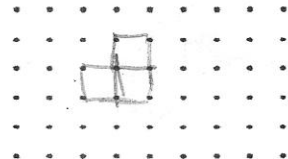
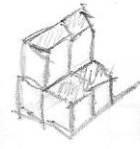
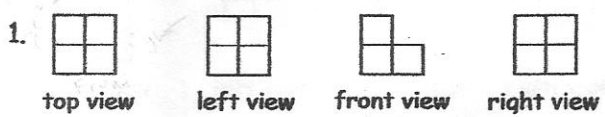
1-2 Exploring Three-Dimensional Figures

Example: Various orthographic views of a solid figure are shown below. The edge of one black line represents one unit of length. Draw the orthographic back view and then draw a front, right corner view.

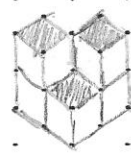
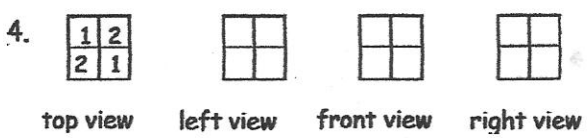
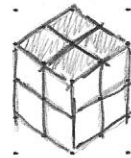
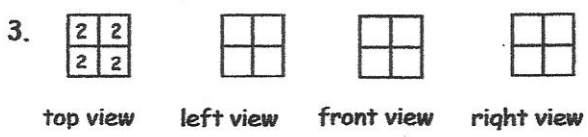


1-2 Worksheet

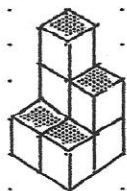
Various orthographic views of a solid figure are shown below. The edge of one black line represents one unit of length. Make a model of each figure. Then draw the orthographic back view of the figure.



From the orthographic views of a solid figure given below, draw the front-right corner view.



5. The front-right corner view of a figure is given below. Draw the orthographic top, left, front, right, and back views of the figure.



top view



left view



front view

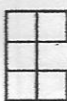
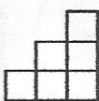
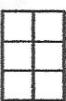
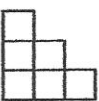


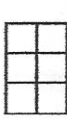
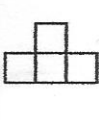
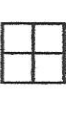
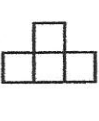
right view

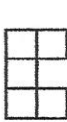
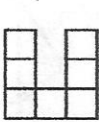
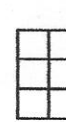
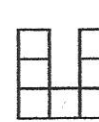


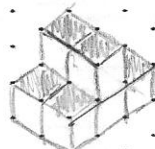
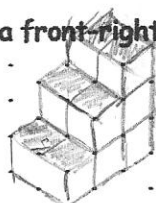
back view

From the orthographic views of a solid figure given below, draw a front-right corner view.







6.    
top view left view front view right view

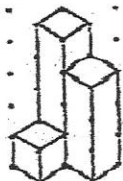





7.    
top view left view front view right view

8.    
top view left view front view right view



The front-right corner view of a figure is given. Draw the orthographic top, left, front, right, and back views of the figure.

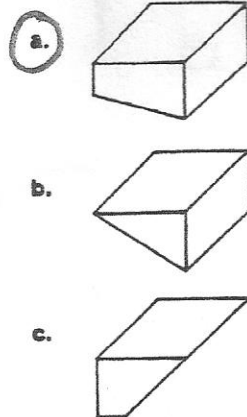
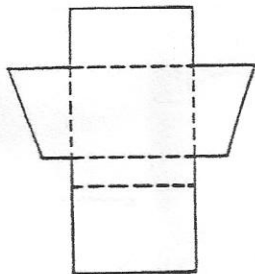
9.      
top view left view front view right view back view

10.      
top view left view front view right view back view

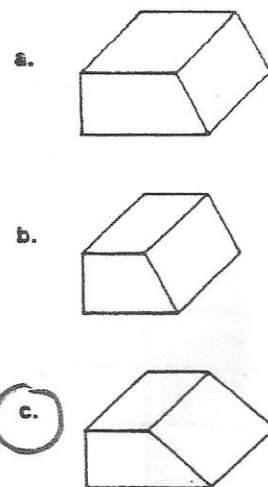
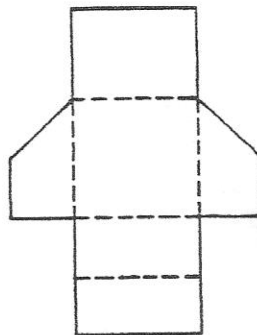
PATTERN FOLDING—SELECT

Each pattern on the left is a wrapper for one of the solids on the right. Draw a circle around the correct solid.

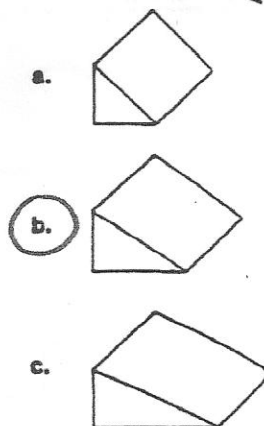
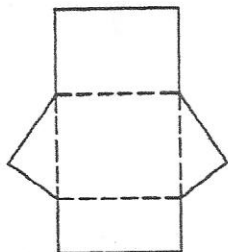
1.



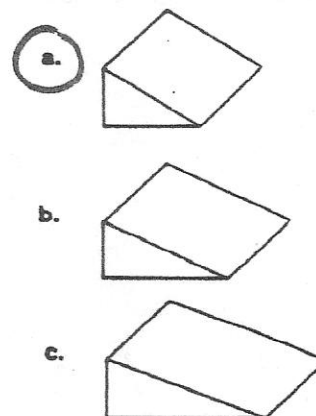
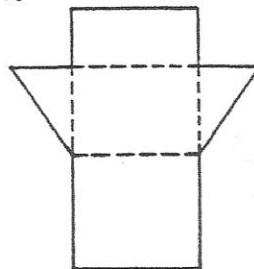
2.



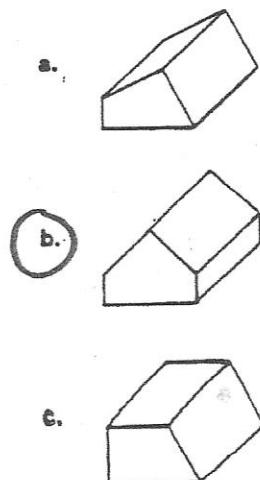
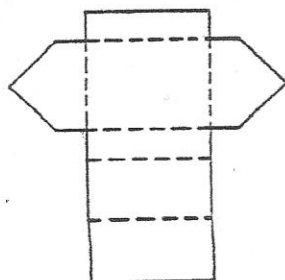
3.



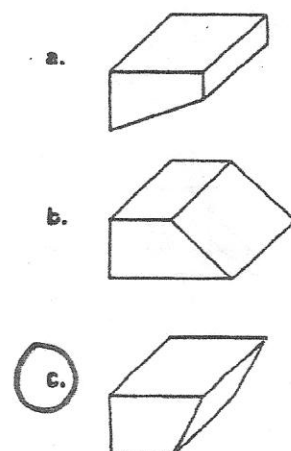
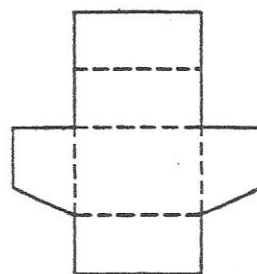
4.



5.

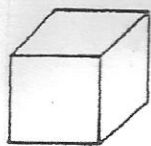


6.



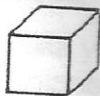
PATTERN FOLDING—MATCHING

Each solid on the left can be covered by one of the wrappers on the right. Write the letter of the matching wrapper on the line by each solid.

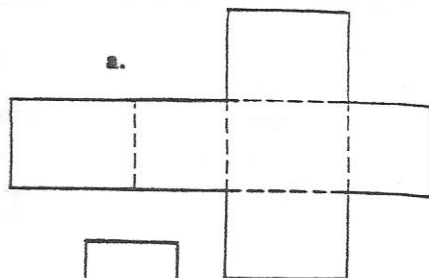


c

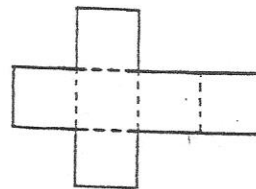
8.



b



b.

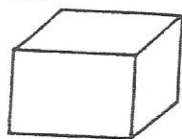


9.

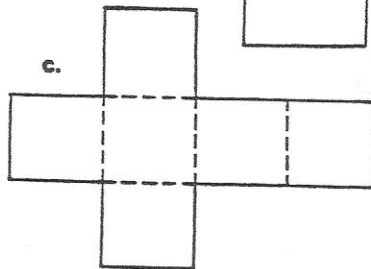


d

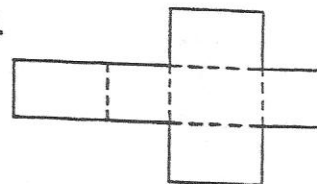
10.



a



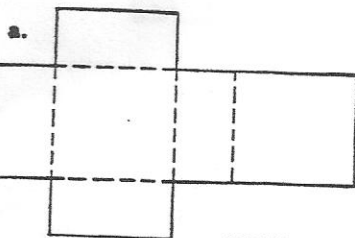
d.



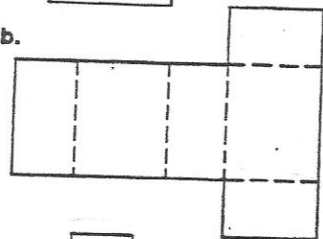
11.



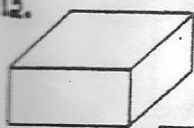
c



b.

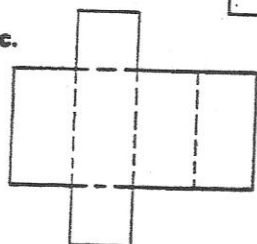


12.



a

c.

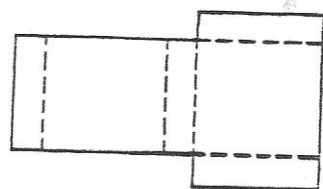


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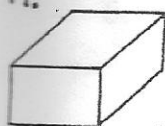


d

d.



14.

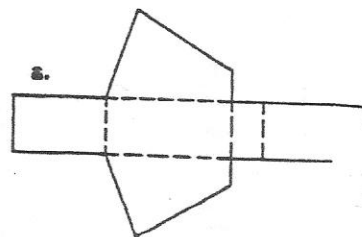


b

15.



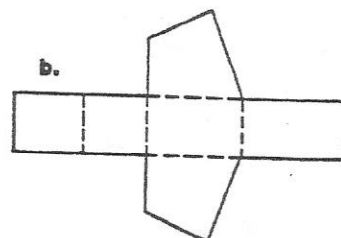
b



16.



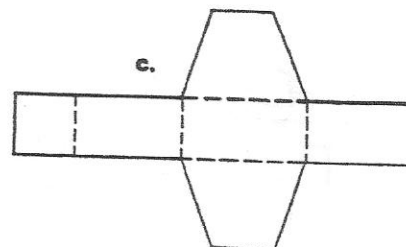
d



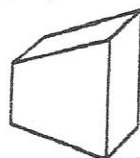
17.



a

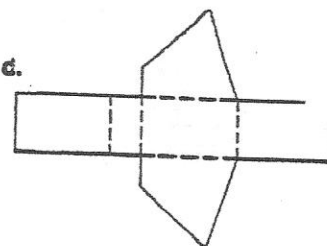


18.



c

d.



EXTENSION

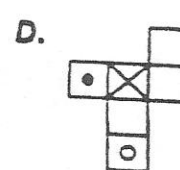
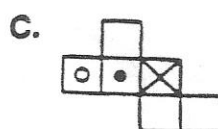
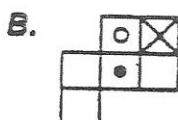
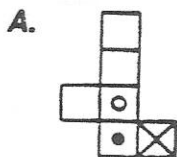
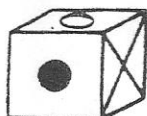
Lesson

12 - 9

Name _____

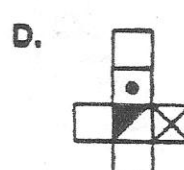
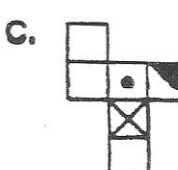
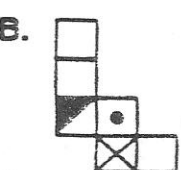
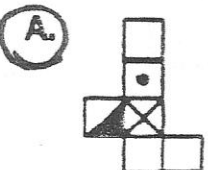
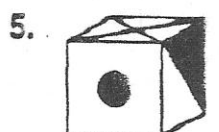
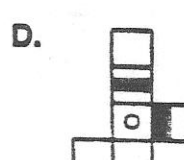
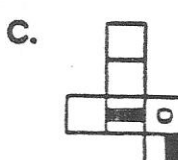
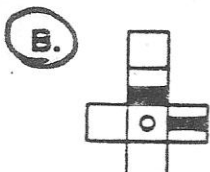
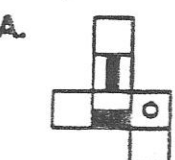
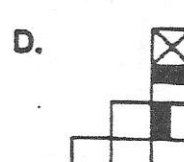
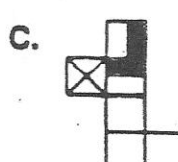
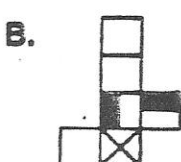
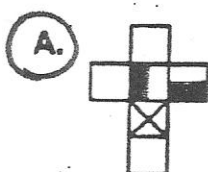
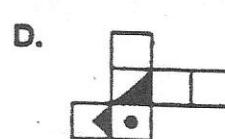
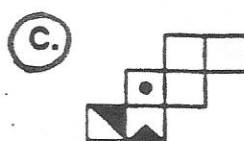
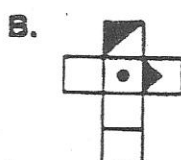
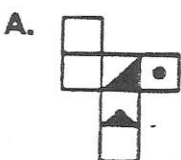
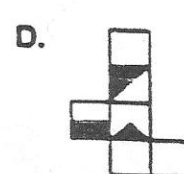
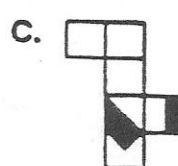
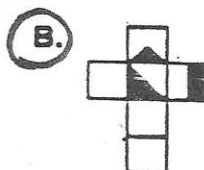
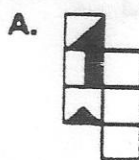
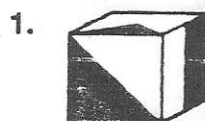
Visualizing in Three Dimensions

On some aptitude tests you will find questions which ask you to visualize three-dimensional constructions. For instance, you might be asked to "fold" patterns in your mind. In the example below, see if you can guess which pattern, when folded, would produce the box on the left.



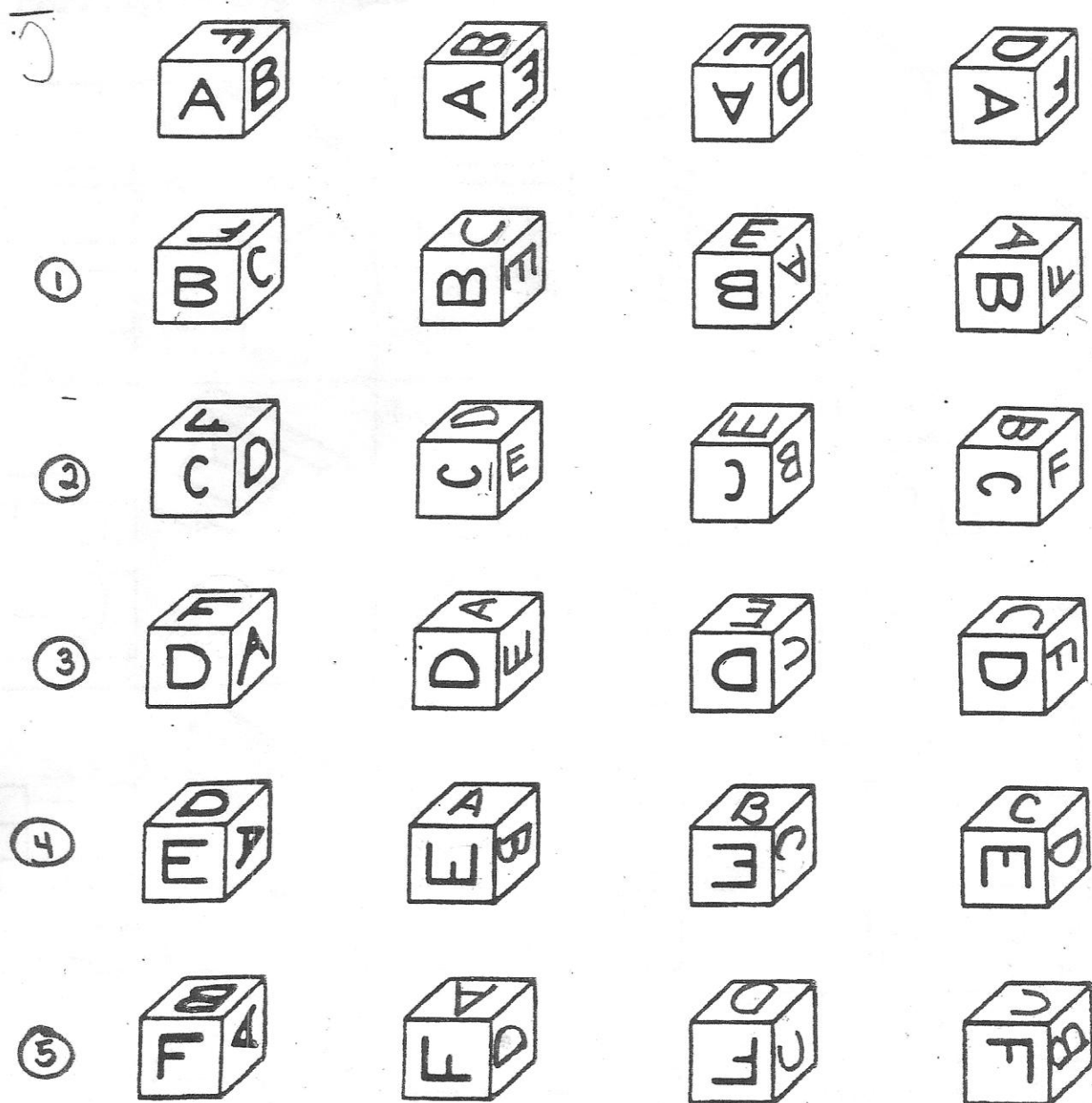
The correct answer is A.

Choose the one pattern from each set that could be folded into the box shown.



CUBE FLIP AND TURN

A CUBE CAN OCCUPY A SPACE IN 24 DIFFERENT WAYS.
CAN YOU FILL IN THE MISSING LETTERS?



MAKE A MODEL !!