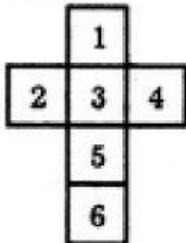


# PRACTICE TEST 45

Construction of Boxes:

The details of the cube formed when a sheet is folded to form a box:

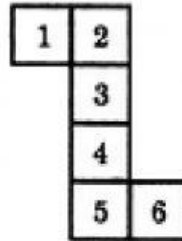
Form I



**In this case:**

- 1 lies opposite 5;
- 2 lies opposite 4;
- 3 lies opposite 6.

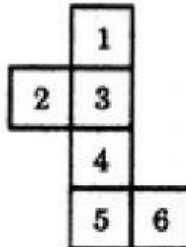
Form II



**In this case:**

- 1 lies opposite 6;
- 2 lies opposite 4;
- 3 lies opposite 5.

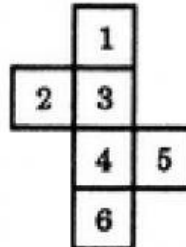
Form III



**In this case:**

- 1 lies opposite 4;
- 2 lies opposite 6;
- 3 lies opposite 5.

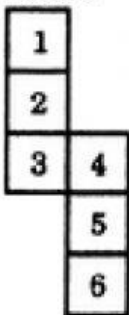
Form IV



**In this case:**

- 1 lies opposite 4;
- 2 lies opposite 5;
- 3 lies opposite 6.

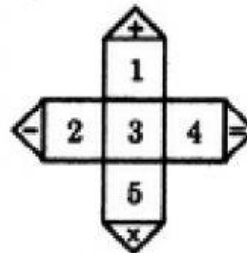
Form V



**In this case:**

- 1 lies opposite 3;
- 2 lies opposite 5;
- 4 lies opposite 6.

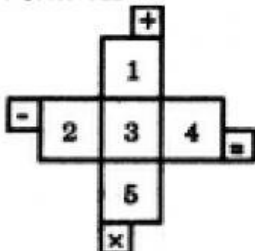
Form VI



**In this case:**

- will be the one of the faces of the cube and it lies opposite 3;
- 2 lies opposite 4;
- 1 lies opposite 5.

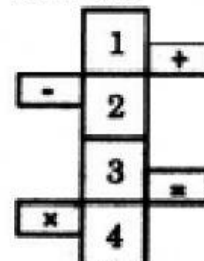
Form VII



**In this case:**

- will be the one of the faces of the cube and it lies opposite 3;
- 2 lies opposite 4;
- 1 lies opposite 5.

Form VIII



**In this case:**

- and are two faces of the cube that lie opposite to each other.
- 1 lies opposite 3;
- 2 lies opposite 4;

1. Three different positions of a dice are shown below. How many dots lie opposite 2 dots?



(i)



(ii)



(iii)

- A. 1  
C. 5  
B. 3  
D. 6

2. The six faces of a dice have been marked with alphabets A, B, C, D, E and F respectively. This dice is rolled down three times. The three positions are shown as:



(i)



(ii)



(iii)

Find the alphabet opposite A.

- A. C  
C. E  
B. D  
D. F

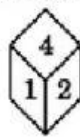
3. Three positions of a dice are given. Based on them find out which number is found opposite the number 2 in the given cube.



(i)



(ii)



(iii)

- A. 6  
C. 3  
B. 5  
D. 1

4. A dice is thrown four times and its four different positions are shown below. Find the number on the face opposite the face showing 2.



(i)



(ii)



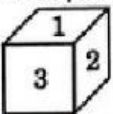
(iii)



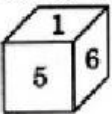
(iv)

- A. 3  
C. 5  
B. 4  
D. 6

5. Two positions of a dice are shown. When 4 is at the bottom, what number will be on the top?



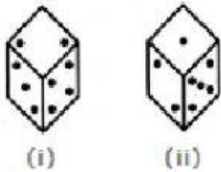
(i)



(ii)

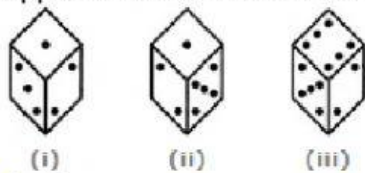
- A. 1  
C. 5  
B. 2  
D. 6

6. A dice is rolled twice and the two positions are shown in the figure below. What is the number of dots at the bottom face when the dice is in position (i)?



- A. 1  
B. 5  
C. 6  
D. Cannot be determined

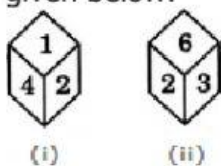
7. Below are depicted the three different positions of a dice. Find the number of dots on the face opposite to the face with one dot.



- A. 2  
B. 3  
C. 4  
D. 6

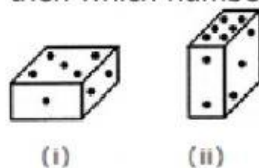
8. A dice is numbered from 1 to 6 in different ways.  
If 1 is adjacent to 2, 3 and 5, then which of the following statements is necessarily true?  
A. 4 is adjacent to 6  
B. 2 is adjacent to 5  
C. 1 is adjacent to 6  
D. 1 is adjacent to 4

9. What will be the number at the bottom, if 5 is at the top; the two positions of the dice being as given below:



- A. 1  
B. 2  
C. 3  
D. 6

Two positions of a parallelepiped are shown below. When the number 3 will be on the top side, then which number will be at the bottom?



- A. 1  
B. 4  
C. 5  
D. 6