

**INTERNATIONAL INDIAN SCHOOL, BURAI DAH**  
**COMPUTER SCIENCE**  
**CLASS 5 A/B/C - 2025-26**

**Worksheet - II**  
**SECTION A**

**Choose the correct answer and write the option.**

1. Which of these shapes has both rotational and mirror symmetry?  
a) Trapezium b) Rectangle c) Scalene triangle d) Letter R
2. Which of these has infinite lines of symmetry and rotational symmetry?  
a) Square b) Circle c) Triangle d) Hexagon
3. Suppose there is a code that must be formed, the first digit has A,B or C the right place has 2,3 or 4 how many different codes are possible using the rules as stated?  
a) 3 b) 6 c) 9 d) 12
4. Which shape shows no symmetry at all?  
a) Circle b) Scalene triangle c) Rectangle d) Equilateral triangle
5. The number after 12 ( in decimal) is:  
a) 1010 b) 13 c) 10 d) 11
6. Which of these binary numbers comes 1 before 100101?  
a) 100100 b) 100001 c) 101010 d) 100111
7. To find the number of combinations of 2 groups, you should:  
a) Subtract their totals b) Divide their totals c) Multiply the number of choices d) Add the number of items
8. In translational symmetry, the shape is:  
a) Rotated b) Reflected c) Moved or slid in a direction d) Enlarged

**SECTION B**

**Write the correct answer in the blank.**

1. \_\_\_\_\_ is merely the presence of pattern.
2. In mirror symmetry, the image is divided by \_\_\_\_\_
3. The center point around which a shape is rotated is called the \_\_\_\_\_ of rotation.
4. A computer understands only \_\_\_\_\_
5. successor of 11 (in binary) is \_\_\_\_\_
6. The goal of Sudoku is to fill the grid so that each number appears \_\_\_\_\_ in each row, column, and mini grid.
7. The binary equivalent of 4 is \_\_\_\_\_

**SECTION C**

**State True or False.**

1. A shape has rotational symmetry if it looks the same after a full turn.
2. The points equally far away from the line of symmetry are different.
3. Sudoku is a number-based puzzle, but it does not require addition or subtraction.

4. If you have 3 ice creams and no cones, you still have 3 combinations.
5. In a 4x4 Sudoku, the same number can appear in different rows, as long as it does not repeat in the same column or 2x2 box.

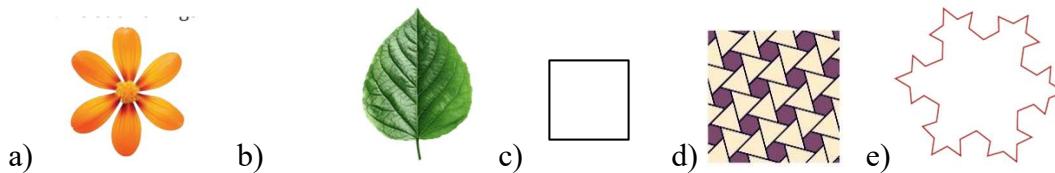
### SECTION D

#### ANSWER THE FOLLOWING

1. Stack 2 Yellow and 1 Black bricks. But the Black brick must be on top. Draw valid combinations.
2. Suppose you must stack up a tower of 3-green and 2-blue bricks. All bricks of the same color are identical. How will you find out the number of combinations? You may use all green or all blue bricks, also.
3. Suppose you have four blocks Blue block, 1 Green block, and 2 Red blocks. Draw all the possible stacking combinations where:
  - The two Red blocks must always stay together,
  - And they must always be placed in the middle of the stack.
  - Use colors to represent each block.
4. What do you mean by symmetry? Name and explain its types.
5. Stack 1 Yellow, 1 Green, and 1 Blue brick. All are different. Draw all the combinations.

### SECTION E

1. Identify the type of symmetry.



2. Based on the table below, answer the following questions

Name	Age	Grade	Favorite Subject	House	Sports Played
Ayaan	10	5	Math	Red	Football, Basketball
Micheal	11	5	Science	Blue	Badminton
Riya	10	5	English	Green	Basketball, Tennis
Kabir	11	5	Math	Yellow	Cricket, Football
Sara	10	5	EVS	Red	Skating

- a) Which student shares the same age and house as Ayaan but has a different favorite subject?
- b) Which student plays the most sports, and what are they?
- c) If a student is older than Sara and does not play Football, who can it be?
- d) Who is the only student that plays a sport no one else plays and what is it?
- e) Which two students have the same favorite subject but are in different houses?
- f) If students are grouped by favorite subject, how many groups are formed?

- g) Who among the students does not share their favorite subject with anyone else?
- h) Which sport is played by more than one student, and who are they?
- j) How many students are exactly 10 years old and play more than one sport?
- k) If the school wants to form a mixed team of students who play Football and are from different houses, who should they choose?