

Lab Activities of Mathematics (2024-25)

VIII

Month	Practical/Activity to be conducted
April	1. To verify that the sum of interior angles of a quadrilateral is 360° by paper cutting and pasting method. 2. To make the following by paper folding and cutting. a) a kite b) a rhombus
May	3. To verify that the sum of exterior angles of any polygon is 360° by paper cutting and pasting method. 4. To verify experimentally that the diagonals of a rectangle and a square are of equal length.
July	5. To make a die by using the given net of the cube and observe the outcomes of numbers appearing on its top face when this die is tossed 20 times. 6. To compare the surface areas of two-unit cubes and the cuboid formed by joining these two-unit cubes.
August	7. To verify the formula $(a + b)^2 = a^2 + b^2 + 2ab$, by using an identity kit. 8. To verify the formula $(a - b)^2 = a^2 + b^2 - 2ab$, by using an identity kit.
October	9. To explore the relationship between the length (in cm) and perimeter (in cm) of 4 squares of different dimensions drawn on squared paper. 10. To explore the relationship between the length (in cm) and area (in cm^2) of 4 squares of different dimensions drawn on squared paper.
November	11. To derive the formula for the lateral surface area of a right circular cylinder by cutting and pasting method. 12. To make cubes and cuboids of given dimensions (in cm) using unit cubes and to calculate the volume of each. a) $4 \times 3 \times 2$ b) $3 \times 3 \times 3$
December	13. To find the experimental probability of the unit's digit of telephone numbers listed on a page selected at random from a telephone directory. 14. To form a cube experimentally and to find the formula for its surface area.
January	15. To explore the relationship between the length (in cm) and perimeter (in cm) of 4 squares of different dimensions drawn on squared paper. (Revision.) 16. To explore the relationship between the length (in cm) and area (in cm^2) of 4 squares of different dimensions drawn on squared paper. (Revision.)
February	17. To derive the formula for the lateral surface area of a right circular cylinder by cutting and pasting method. (Revision.) 18. To find the experimental probability of the unit's digit of telephone numbers listed on a page selected at random from a telephone directory. (Revision.)