## FIRST TERM MODEL QUESTION PAPER 2024 WITH ANSWER KEY SET 3 MATHS - Standard VII Time: 2 hours Max. Marks: 50 (Prepared by www.educationobserver.com)

# Instructions:

- 1. Read the questions carefully before answering.
- 2. Attempt any six activities from the given eight activities.
- 3. All activities carry equal marks.

#### Activity 1

Two parallel lines are cut by a transversal. If one of the corresponding angles is 75°, find all the remaining angles formed. Explain the relationships between corresponding, alternate interior, and co-interior angles.

### Activity 2

A square has a perimeter of 32 cm. Calculate the area of the square. If a rectangle has the same perimeter but with a length of 10 cm, calculate its width and area.

### Activity 3

Simplify the following expressions involving fractions:



Show all steps.

### Activity 4

A piece of cloth is 25 meters long. It is cut into 5 equal pieces. If 3 pieces are used, what is the length of the remaining cloth? Express the remaining cloth as both a fraction and in meters.

Activity 5

A quadrilateral has two opposite sides that are parallel and the other two sides are equal in length. Construct the quadrilateral, measure all sides, and label the angles. Discuss the properties of this quadrilateral.

### Activity 6

A tank can hold 1,000 liters of water. If it is 3/4 full, how many liters of water does it contain? If 200 liters are used, what fraction of the tank remains filled?

### Activity 7

Calculate the area and perimeter of a rectangle with a length of 9 meters and a width of 4 meters. If a square has the same area, what would be the side length of the square?

### Activity 8

Construct a triangle with sides of lengths 6 cm, 7 cm, and 8 cm. Measure and label all angles. Determine if the triangle is acute, obtuse, or right-angled.