ST. THOMAS SCHOOL, SAHIBABAD
PERIODIC TEST III (2025 – 2026)
WORKSHEETQ1
SUBJECT: MATHEMATICS (041)
CLASS IX

TIME: 1 HR.   **MM: 20**

1. Find the value of k if (4, 1) is a solution of the linear equation x + ky = 9.   [1]

2. In a quadrilateral ABCD, AB = CD and AB ∥ CD. What special type of quadrilateral is ABCD? [1]

3. PQRS is a parallelogram with diagonals intersecting at O. If AC = 15 cm and BD = 12 cm.   [1]
    Write the lengths of AO and BO.

4. Two sides of a triangle are 15 cm and 17 cm. Find the third side of the triangle if its perimeter [1]
    is 50 cm.

5. Express the equation 5x – 3y = 15 in the standard form ax + by + c = 0. Also write the   [2]
    values of a, b and c.

6. Prove that the diagonals of a rectangle are equal.   [2]

7. The sides of a triangle are in the ratio 3 : 4 : 5 . Find its area, if the perimeter of the triangle [2]
    is 240 cm.

8. The labour charges for the carpenter comprises of a fixed charge of ₹1500 and an additional [3]
    charge of ₹175 per day.
    Write a linear equation for the situation, taking the number of days as x and the total amount
    as ₹y. Find the total amount for 9 days. Find the number of days the carpenter worked, if he
    received ₹6750.

9. Find the area of a triangle with sides 30 cm, 54 cm and 61 cm.   [3]

10. Prove that the line segments joining the mid points of the opposite sides of a quadrilateral [4]
    bisect each other.