ST. THOMAS SCHOOL, SAHIBABAD

PERIODIC TEST – III (2024 – 2025)

WORKSHEET

MATHEMATICS (041)

CLASS – IX

MM: 20 **TIME – 1 HOUR**

1.	If the point (3, 2) satisfies the equation $3y = ax + 5$, find the value of a.	1
2.	ABCD is a rectangle, P and Q are midpoints of AD and DC respectively. If AB = 4cm and BC is 3 cm then find PQ.	1
3.	Write the equation $\frac{x}{2} + \frac{3y}{5} = 1$ in standard form.	1
4.	ABCD is a rhombus such that $\angle ACB = 50°$. Find $\angle ADB$.	1
5.	A diagonal of parallelogram divides it into two congruent triangles.	2
6.	Ram and Hari have some pencils. Ram said to Hari, if you will give me 10 pencils, I will have twice the pencils left with you. Represent this situation as a linear equation in two variables. Also find the number of pencils they had.	2
7.	PQRS is a parallelogram and X, Y are the mid-points of sides PQ and SR respectively. Show that PXRY is a parallelogram.	2
8.	Show that the diagonals of a rhombus are perpendicular to each other.	3
9.	The sides of a triangular plot are in the ratio of 3:5:7 and its perimeter is 300 m. Find its area.	3
10.	Prove that the straight line joining the mid points of the diagonals of a trapezium is parallel to the parallel sides and is equal to half the difference of these sides.	4