KENDRIYA VIDYALAYA SANGATHAN, HYDERABAD REGION
SAMPLE PAPER 03 FOR PERIODIC TEST-II (2017-18)

SUBJECT: MATHEMATICS(041)

BLUE PRINT FOR PERIODIC TEST-II: CLASS IX

Chapter	VSA (1 mark)	SA – I (2 marks)	SA – II (3 marks)	LA (4 marks)	Total
Number System	--	--	3(1)	--	**3(1)**
Polynomials	1(1)	2(1)	--	--	**3(2)**
Coordinate Geometry	--	--	3(1)	--	**3(1)**
Linear Equation in two variables	1(1)	--	--	4(1)	**5(2)**
Introduction to Euclid's Geometry	--	2(1)	--	--	**2(1)**
Lines and Angles	1(1)	--	3(1)	--	**4(2)**
Triangles	--	2(1)	--	4(1)	**6(2)**
Quadrilaterals	1(1)	2(1)	--	4(1)	**7(3)**
Areas of Parallelograms and triangles	--	--	3(1)	4(1)	**7(2)**
Total	**4(4)**	**8(4)**	**12(4)**	**16(4)**	**40(16)**

MARKING SCHEME FOR PERIODIC TEST-II (2017-18)

SECTION	MARKS	NO. OF QUESTIONS	TOTAL
VSA	1	4	04
SA – I	2	4	08
SA – II	3	4	12
LA	4	4	16
GRAND TOTAL			**40**

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SAMPLE PAPER 03 FOR PERIODIC TEST-II (2017-18)

SUBJECT: MATHEMATICS **MAX. MARKS : 40**
CLASS : IX **DURATION :1½ HRS**

General Instructions:
(i). **All** questions are compulsory.
(ii). This question paper contains **16** questions divided into four Sections A, B, C and D.
(iii). **Section A** comprises of 4 questions of **1 mark** each. **Section B** comprises of 4 questions of **2 marks** each. **Section C** comprises of 4 questions of **3 marks** each and **Section D** comprises of 4 questions of **4 marks** each.
(iv). Use of Calculators is not permitted

SECTION – A

1. Factorize: $12x^2 - 7x + 1$

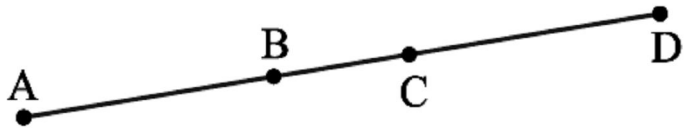
2. In ΔABC, AB = 5 cm, BC = 8 cm and CA = 7 cm. If D and E are respectively the mid-points of AB and BC, determine the length of DE.

3. The angles of triangle are $(x + 10^0)$, $(2x - 30^0)$ and x^0. Find the value of x.

4. Write the linear equation such that each point on its graph has an ordinate 3 times its abscissa.

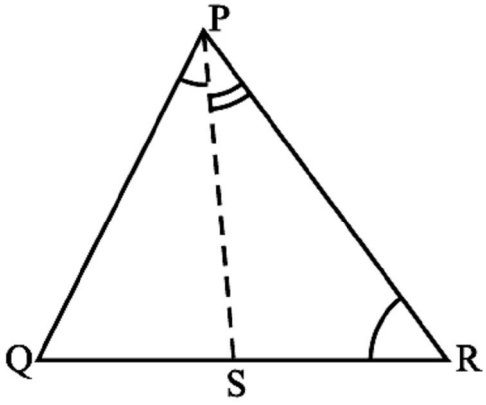
SECTION – B

5. In below Fig. , if AC = BD, then prove that AB = CD



6. One angle of a quadrilateral is of 108^0 and the remaining three angles are equal. Find each of the three equal angles.

7. In the below figure, PR > PQ and PS bisects ∠QPR. Prove that ∠PSR > ∠PSQ.



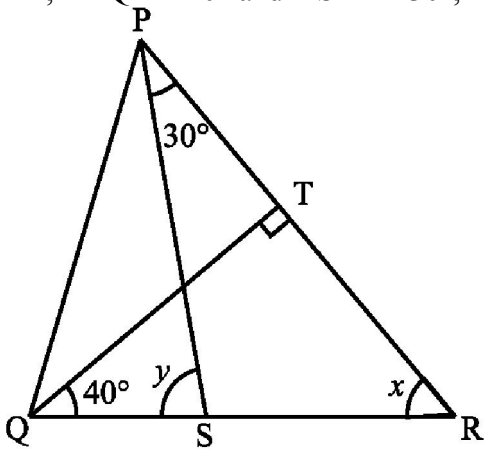
8. Without actually calculating the cubes, find the value of $(28)^3 + (-15)^3 + (-13)^3$

SECTION – C

9. Three vertices of a rectangle are (4, 2), (– 3, 2) and (– 3, 7). Plot these points and find the coordinates of the fourth vertex.

10. Visualize $4.\overline{26}$ on the number line, using successive magnification upto 4 decimal places.

11. In the below figure, if QT ⊥ PR, ∠TQR = 40° and ∠SPR = 30°, find x and y.

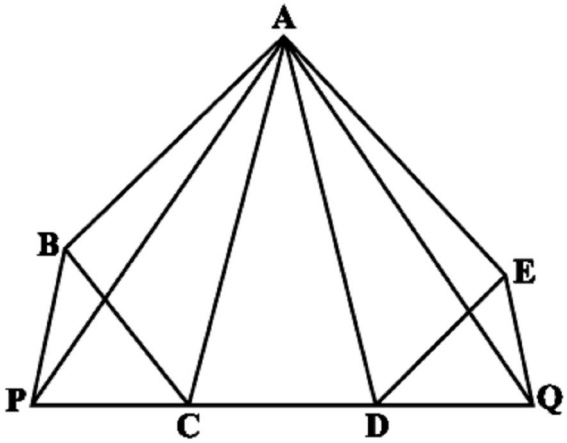


12. Show that a median of a triangle divides it into two triangles of equal areas.

SECTION – D

13. Prove that the sum of any two sides of a triangle is always greater than the third side.

14. In the below figure, ABCDE is any pentagon. BP drawn parallel to AC meets DC produced at P and EQ drawn parallel to AD meets CD produced at Q. Prove that ar (ABCDE) = ar (APQ)



15. Prove that "*The line segment joining the mid-points of two sides of a triangle is parallel to the third side and half of it*."

16. The taxi fare in a city is as follows: For the first kilometre, the fare is Rs 8 and for the subsequent distance it is Rs 5 per km. Taking the distance covered as x km and total fare as Rs y, write a linear equation for this information, and draw its graph.