Class : 7

Register Number

FIRST TERM - SUMMATIVE ASSESSMENT(SA) - 2024 - 25

MATHEMATICS

Time Allowed : 2.00 Hours] [Max. Marks :60

PART - I

I. Choose the correct Answer. 5x1=5

1. The set of integers is not closed under ----------
   a) Addition b) Subtraction c) Multiplication d) Division
2. The angle between the diagonals of a rhombus is ----------
   a) 120° b) 180° c) 90° d) 100°
3. In an expression we can add or subtract only ----------
   a) Like Terms b) Unlike Terms c) All terms d) None of the above
4. If the cost of 3 books is ₹.90, then find the cost of 12 books.
   a) ₹.300 b) ₹.320 c) ₹.360 d) ₹.400
5. Vertically opposite angles are -------
   a) Not equal in measure b) Complementary
   c) Supplementary d) Equal in measure

II. Fill in the Blanks. 5x1=5

6. The integer -------- is the additive identity for integers.
7. A four sided closed shape in which opposite sides are both parallel and equal is called -----
8. The numerical coefficient of the term -xy is -------
9. A tetromino is a shape obtained by ------ squares together.
10. The adjacent angles that are supplementary are called -------

III. Say True or False: 5x1=5

11. 15-(-18) is the same as 15+18.
12. Perimeter is the region occupied by the closed shape.
13. Every algebraic expression is an equation.
14. Distance travelled by a bus and time taken are in direct proportion.
15. Two parallel lines are cut by a transversal, each pair of corresponding angles are not equal.

IV. Match the following. 5x1=5

16.	$(5x2) + (5x5) = 5 \times (2+5)$	a)	$xy=k$
17.	Area of the Rhombus	b)	0
18.	$x + (-x)$	c)	360°
19.	Inverse proportion	d)	Distributive property
20.	Angle at a point	e)	$\frac{1}{2} \times d_1 \times d_2$ sq. units

PART - II

V. Answer any 10 questions. 10x2=20

21. Add (-3) and (-5) using number line.
22. Find the product of (-2) x 50 x (-25) x 4.
23. Given 168 x 32 = 5376 then, find (-5376) + (-32).
24. How many years are between 323 BC(BCE) and 1687 AD (CE)?
25. Find the area of the parellelogram whose base is 10m and height is 7m?

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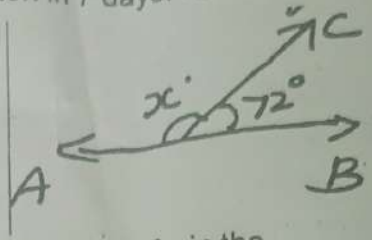
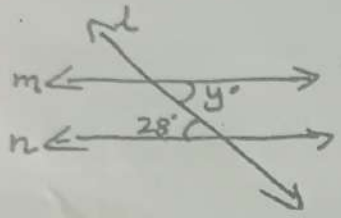
26. Calculate the area of the rhombus having diagonals are 6cm and 8cm.
27. Find the area of a trapezium whose parallel sides are 24 cm and 20 cm, and the distance between them is 15 cm.
28. If x = 2 and y = 3 then find the value of 2x - 3y.
29. Subtract 15q from 25q.
30. Solve: x + 5 = 8.
31. A dozen bananas cost ₹.20. What is the price of 48 bananas?
32. 60 workers can spin a bale of cotton in 7 days. In how many will 42 workers spin it?
33. Given that AB is a straight line Calculate the value of x°.



34. 

Find the value of y in the given figure.

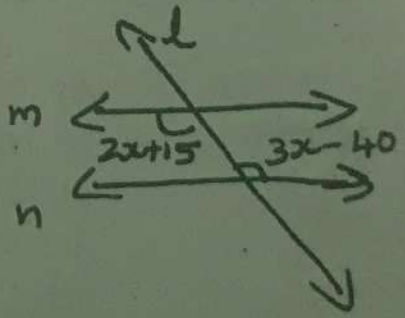
35. Draw five tetrominoe shapes.

PART - III

5x3=15

VI. Answer any 5 of the following questions.

36. Find all the possible pairs of integers that give a product of -50.
37. Scientists use the Kelvin scale (K) as an alternative temperature scale to degrees celsius (°C) by the relation T°C = (T+273)K. Convert the following to Kelvin:
    i) -275°C ii) 45°C iii) -400°C
38. A ground is in the shape of parallelogram the height of the parellelogram is 14 m and the corresponding base is 8 metres longer than its height. Find the cost of levelling the ground at the rate of ₹.15 per sq.m.
39. The area of a rhombus is 100 sq.cm and length of one of its diagonals is 8cm. Find the length of the other diagonal.
40. Write the variable constant and terms of the expression 7p - 4q + 5.
41. Simplify: (x+y-z) + (3x-5y+7z) - (14x+7y-6z)
42. Find the value of angle x in the given figure.



43. If the three angles at a point are in the ratio 1:4:7. Find the value of each angle?

PART - IV

1x5=5

VII. Answer the following.

44. a) Construct a perpendicular bisector of the line segment AB = 8 cm.

(OR)

b) Construct an angle 120° using ruler and compass only.