



# B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS  
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



## TERM-1 EXAMINATION (2025-26) MATHEMATICS

Class: VII  
Date: 03.09.25  
Admission no:

Time: 3 hrs.  
Max Marks: 80  
Roll no:

### General Instructions:

- This question paper consists of FIVE sections
- All answers must be correctly numbered as in the question paper and written in the answer sheet.
- Write neatly and draw diagrams wherever necessary.

### Section A

Choose the correct answer

1 x 20 = 20

1. If  $25 \times 32 = 800$  then  $2.5 \times 3.2 =$  \_\_\_\_\_  
(a) 0.800 (b) 8.00 (c) 80.0 (d) 800.0
2. Which of the following is a false statement: \_\_\_\_\_  
(a)  $-4 > -3$  (b)  $-4 < -3$   
(c)  $-4$  and  $-3$  are non-comparable (d) None of these
3. The mode of 4, 4, 4, 9, 15, 15, 15, 27, 37 data set is \_\_\_\_\_  
(a) 4 (b) 15 (c) 4 and 15 (d) 9
4. The greater integer lying between  $-10$  and  $-15$  is \_\_\_\_\_  
(a)  $-12$  (b)  $-11$  (c)  $-14$  (d)  $-15$
5.  $0.036$  m in cm is \_\_\_\_\_  
(a) 3.6 cm (b) 0.36 (c) 36.0 (d) 0.036
6. If the mean of 4, 2, 3, x is 4 what is the value of x  
(a) 1 (b) 4 (c) 7 (d) 5
7. The product of two integers is positive and their sum is negative only when \_\_\_\_  
(a) Both are positive (b) Both are negative  
(c) One positive, one negative (d) One of them is equal to zero
8. What is the median of the given observation : 1.61, 1.75, 1.79, 1.84, 1.96 .  
(a) 1.61 (b) 2.11 (c) 1.79 (d) 1.84
9. An \_\_\_\_\_ is a geometrical figure formed by two rays, when joint at a single point.  
(a) Angle (b) Edge (c) Acute (d) Line
10. When two lines intersect, the \_\_\_\_\_ angles so formed are equal.  
(a) Supplementary (b) Complementary  
(c) Reflex (d) Vertically opposite

11. The reciprocal of  $\frac{3}{7}$  is \_\_\_\_\_
- (a)  $\frac{3}{7}$       (b)  $\frac{7}{3}$       (c)  $\frac{1}{7}$       (d)  $\frac{3}{1}$
12. \_\_\_\_\_ are those lines on a plane that do not meet each other at any point.
- (a) Supplementary angles      (b) Complementary angles  
(c) Parallel lines      (d) vertically opposite angles
13. Which of the following rational numbers is equivalent to  $\frac{2}{3}$  ?
- (a)  $\frac{3}{2}$       (b)  $\frac{4}{9}$       (c)  $\frac{4}{6}$       (d)  $\frac{9}{3}$
14. The reciprocal of \_\_\_\_\_ does not exist.
- (a) 0      (b) 1      (c) 3      (d) 2
15. Find the product of  $(-5 \times \frac{12}{15}) =$
- (a)  $\frac{15}{12}$       (b)  $\frac{-3}{1}$       (c)  $\frac{-1}{4}$       (d)  $\frac{-4}{1}$
16. How many rays can be drawn from a given point?
- (a) 2      (b) 5      (c) 8      (d) Infinitely many
17. What is the opposite of earning Rs. 100?
- (a) sharing Rs. 100      (b) profit of Rs. 100  
(c) gaining Rs. 100      (d) losing Rs. 100
18. The simplest form of  $-\frac{25}{125}$  is \_\_\_\_\_
- (a) 5      (b) -5      (c)  $-\frac{1}{5}$       (d) None of these
19. Assertion: 5 is a rational number.  
Reason: The square roots of all positive integers are rational
- (a) Both assertion and reason are correct and reason is a correct explanation for assertion.  
(b) Both assertion and reason are correct but the reason is correct explanation for the assertion.  
(c) The assertion is correct, but the reason is false.  
(d) Both assertion and reason are false.
20. Assertion: Two lines that do not intersect on a plane are always perpendicular.  
Reason: Parallel lines never meet, hence they form  $90^\circ$  angles with each other.
- (a) Both assertion and reason are correct and reason is correct explanation for assertion.  
(b) Both assertion and reason are correct but reason is correct explanation for the assertion.  
(c) Assertion is correct but reason is false.  
(d) Both assertion and reason are false.

## Section B

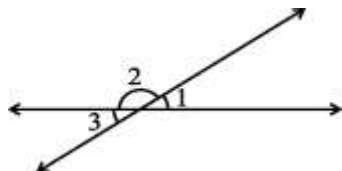
**Do as directed**

**2 x 5 = 10**

21. Find the sum of the pairs of integers: (a)  $-6, -4$  (b)  $+3, -4$

22. Find: (a)  $2.3 \div 100$  (b)  $78.9 \div 1000$

23. In the given figure, if  $\angle 1 = 30^\circ$ , find  $\angle 2$  and  $\angle 3$ .



or

Find the complement of each of the following angles:

(a)  $35^\circ$

(b)  $72^\circ$

24. Write five rational numbers that are smaller than 2.

25. The weights (in kg.) of 15 students present in a class are:

38, 42, 43, 35, 37, 45, 50, 32, 43, 40, 36, 38, 43, 38 and 47

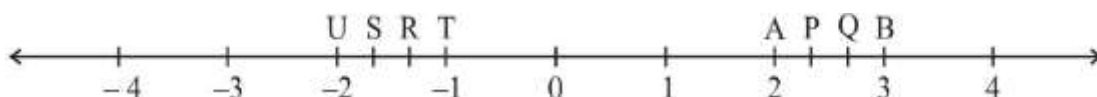
Determine the Mode and Median of the above data.

## Section C

**Solve the following**

**3 x 6 = 18**

26. The points P, Q, R, S, T, U, A and B on the number line. Find the value of the rational numbers represented by P, Q, R and S



or

Write the following rational numbers in descending order:  $-\frac{1}{3}$ ,  $\frac{4}{9}$ ,  $-\frac{2}{3}$

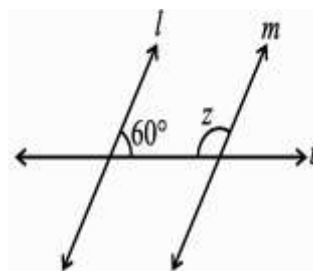
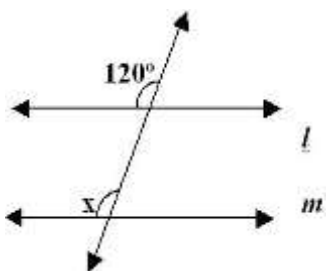
27. Among two supplementary angles the measure of the larger angle is  $44^\circ$  more than the measure of the smaller. Find their measures.

or

Lines  $l \parallel m$ ;  $t$  is a transversal. Find the value of  $\angle z$  and  $\angle x$

(a)

(b)



28. The marks (out of 100) obtained by a group of students in a science test are 85, 76, 90, 85, 39, 48, 56, 95, 81 and 75.

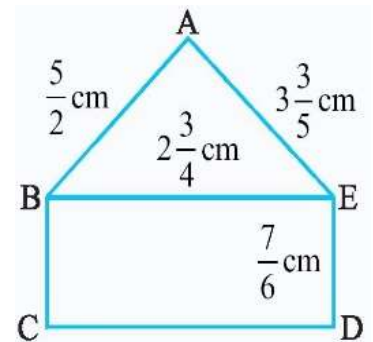
Find the: (a) Highest and the lowest marks obtained by the students.

(b) Range of the marks obtained.

(c) Mean marks obtained by the group.

29. At Srinagar temperature was  $-5^{\circ}\text{C}$  on Monday and then it dropped by  $2^{\circ}\text{C}$  on Tuesday. What was the temperature of Srinagar on Tuesday? On Wednesday, it rose by  $4^{\circ}\text{C}$ . What was the temperature on this day?

30. Find the area of rectangle BCDE in this figure



31. Consider the following data gathered from a survey of a colony.

Draw a double bar graph choosing an appropriate scale.

Favourite Sport:	Cricket	Basket – Ball	Swimming	Hockey	Athletics
Watching	1240	470	510	423	250
Participating	620	320	320	250	105

### Section D

Solve the following

$$5 \times 4 = 20$$

32. Evaluate each of the following:

(a)  $(-30) \div 10 \times -1$

(b)  $50 \div (-5) \times -(-5)$

(c)  $(-36) \div (-9)$

(d)  $(-49) \div [49 \times (-1)]$

(e)  $13 \div [(-2) + 1]$

33. In a village of 40 children  $\frac{1}{5}$  of the total number of children like to play

Cricket,  $\frac{2}{5}$  of the total number like to play football and the remaining children like to play chess.

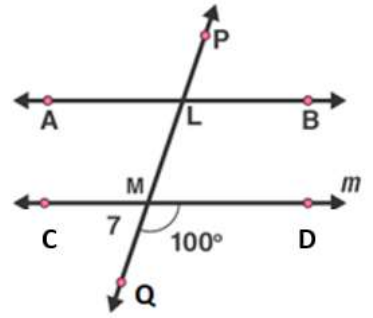
(a) How many children like to play cricket?

(b) How many children like to play football?

(c) What fraction of the total number of children like to play chess?

(d) Find the sum of all the children of different sports is 40 ?

34. In the adjoining figure,  $AB \parallel CD$  and a transversal  $PQ$  cuts at  $L$  and  $M$  respectively. If  $\angle QMD = 100^\circ$ , find all the other angles.



35. Solve the expression by following the order of operations.

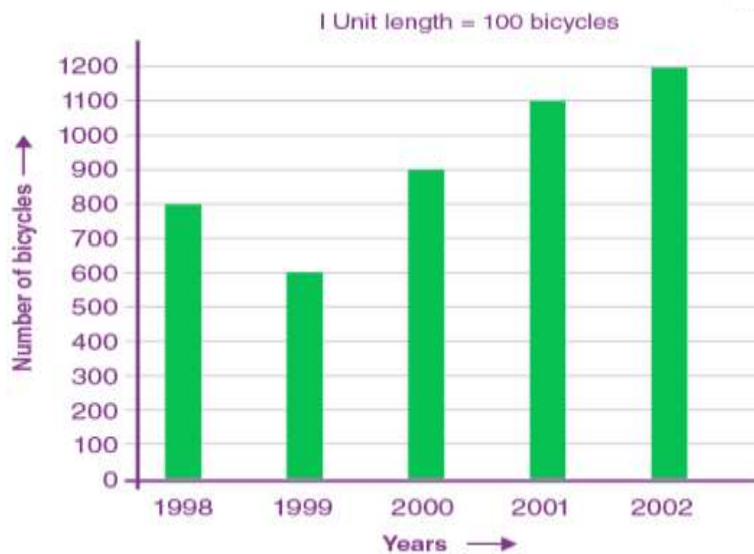
$$\frac{-2}{3} + \frac{1}{4} \times \frac{5}{6} - \frac{7}{12} \div \frac{2}{3}$$

### Section E

**Do as directed**

$$4 \times 3 = 12$$

36. Read the following bar graph which shows the number of bicycle sold by a bookstore during five consecutive years and answer the question given below

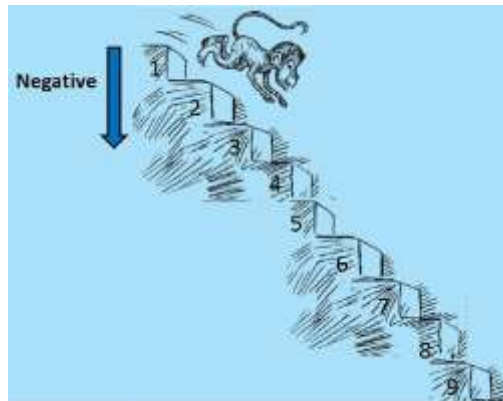


- How many bicycle were sold from 2001 to 2002?
  - In which year were fewer than 700 bicycles sold ?
  - How many bicycles were sold in 2000 than 1998 ?
  - What the scale here in this above graph
37. Divide the sum of  $-2\frac{5}{17}$  and  $3\frac{5}{34}$  by their difference

or

$$\text{Simplify: } 21.5 \div 5 - \frac{1}{5} \text{ of } (20.5 - 5.5) + 0.5 \times 8.5$$

38. A water tank has a step inside it. A monkey is sitting on the utter topmost step (which is the first step). The water level is present at the ninth step. He jumps three steps down the stairs and then successively jumps back two steps upwards. In how many jumps will the Monkey reach the following water level?



or

- (a) Find the product using the suitable properties:

$$26 \times (-48) + (-48) \times (-36)$$

- (b) Verify  $a - (-b) = a + b$  for the following values of alphabets a and b.

$$a = 21, b = 18$$

\*\*\*ALL THE BEST\*\*\*