ANANDALAYA
PERIODIC TEST - 2
Class : VII

Subject: Mathematics   M.M: 50
Date : 25-09-2023   Time: 2 Hours
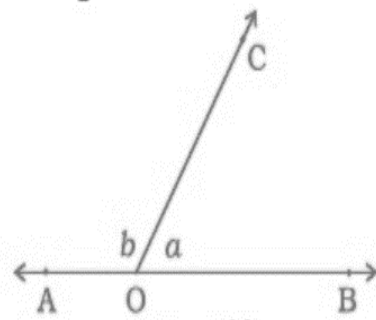
General Instructions:
i) All questions are compulsory.
ii) This question paper contains 24 questions.
iii) Questions 1 – 9in Section A are multiple choice type questions carrying 1 mark each.
iv) Questions 10– 16in Section B are short-answer type questions carrying 2 marks each.
v) Questions 17 – 21 in Section C are short -answer type questions carrying 3 marks each.
vi) Questions 22 – 24 in Section D are long-answer type questions carrying 4 marks.
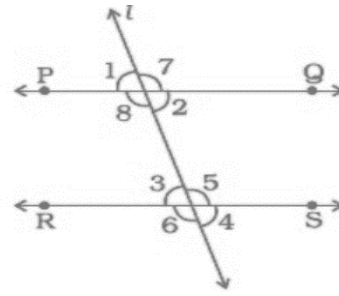
SECTION-A

1. What is the value of :   (1)
   (a) $(-1) \times (-1) \times (-1) \times (-1) \times (-1)$
   (b) $(-12) \div (-12)$

2. a) Write the reciprocal of $\frac{2}{3}$.   (1)

   b) Write $\frac{23}{10}$ in decimals.

3. Ramesh studies for $\frac{2}{6}$ of a day. How many hours in a day does he study?   (1)

4. If the cost of a book is ` 25.57, find the cost of 24 such books.   (1)

5. What is the range of the data given below?   (1)
   21,   6,   17,   18,   12,   8,   4,   13

6. Which of the following numbers in the bracket satisfy the given equations?   (1)
   a) $2x = 16$ $(-8, \ 2, \ 8)$
   b) $\frac{x}{2} = 6$ $(6, \ 3, \ 12)$

7. Find the value of *y*:   (1)
   a) $y + 7 = 20$
   b) $y - 9 = 29$

8. For the given figure, two statements are given below: (1)
   i) a and b are forming a linear pair
   ii) a and b are forming a pair of adjacent angles.

   Then,
   (A) both (i) and (ii) are true
   (B) (i) is true and (ii) is false
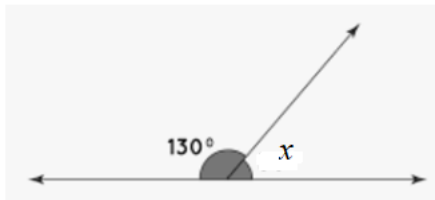   (C) (i) is false and (ii) is true
   (D) both (i) and (ii) are false

9. According to the figure given, which one of the following is not true? (1)
   (A) $\angle 1 + \angle 5 = 180°$
   (B) $\angle 2 + \angle 5 = 180°$
   (C) $\angle 3 + \angle 8 = 180°$
   (D) $\angle 2 + \angle 3 = 180°$

SECTION-B
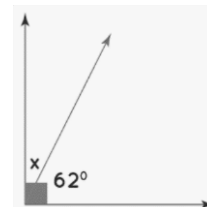
10. Fill in the boxes to make the following statements true: (2)
    (a) $-687 \times \boxed{} = 0$
    (b) $\boxed{} \div (-17) = 0$
    (c) $(-499) \div \boxed{} = 1$
    (d) $\boxed{} \times 10 = (-3) \times 10$

11. Solve the following: (2)
    (a) $(-3) \times (-4) \times (-5) \times (-2)$
    (b) $(-6) \times 7 \times 5$
    (c) $(-108) \div 4$
    (d) $(-96) \div (-3)$

12. a) Out of $-7, \ -5, \ -3, \ 1, \ 4, \ 7, \ 3, \ 5,$ find a pair of integers whose sum is -2. (2)
    b) If the lowest temperature in Gulmarg in Kashmir was $-10°C$ in January and in summer the temperature rose by 44 degree to reach the maximum temperature, what was the maximum temperature that year?

13. Sam can walk $8\frac{1}{3}$ km in one hour. How much distance will he cover in $2\frac{2}{5}$ hours? (2)

14. Ali has twice as many rupees as Raghu. Together they have ` 150. How much money does Raghu have? (2)

15. Write the equations for the given statements: (2)
    a) A number is 8 times another number. Their difference is 42.
    b) When 7 is taken away from thrice a number the result is 17.

16. Find the measure of x in the following figures. Also write in each case, what are these angles together called. (2)
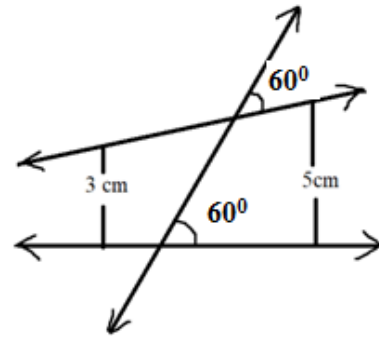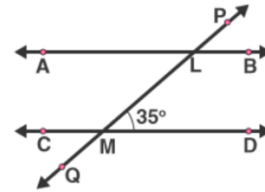   a)   b)

SECTION-C

17. By selling apples at the rate of ` $5\frac{1}{4}$ per apple, a fruit-seller gets ` 630. How many dozens of apples does he sell? (3)

18. The marks scored by 13 students in a Mathematics test are as follows: (3)
    31,   37,   35,   38,   42,   23,   17,   18,   35,   25,   35,   29,   35
    For the given data find:
    a) Mean   b) Median   c) Mode

19. A) Shreya has written the measures of two angles on the figure shown. Do you think it is correct? Justify your answer. (3)

B) In the adjoining figure, AB and CD are parallel lines intersected by a transversal PQ at L and M respectively. If ∠LMD = 35° find ∠PLA.
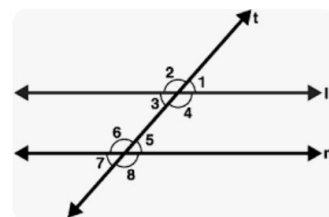

20. Solve the following: (3)
a) $\frac{9}{2}x = 54$
b) $x + \frac{5}{19} = \frac{3}{19}$
c) $\frac{t}{3} + 5 = 20$

21. The students of class VII have to choose one club from Music, Dance, Yoga, Dramatics, Fine Arts and Electronics clubs. The data given below shows the choices made by girls and boys of the class. (3)

Clubs	Music	Dance	Yoga	Dramatics	Fine Arts	Electronics
Girls	15	24	10	19	27	21
Boys	12	16	8	17	11	30

Draw a double bar graph using appropriate scale to depict the above data.

SECTION-D

22. Observe the figure given below, $l \parallel m$ and line t is the transversal. Name two pairs of angles from the figure in each case: (4)
a) Alternate Interior angles
b) Corresponding angle
c) Alternate Exterior angles
d) Co-interior angles

23. Solve the following: (4)
a) Find $\frac{3}{7}$ of $4\frac{4}{6}$
b) Multiply 10.05×1.05
c) Divide $6\frac{2}{4}$ by $2\frac{3}{5}$
d) Divide 40.32 by 9.6

24. A green grocer earns a profit of ` 6 per bag of carrots sold and a loss of ` 4 per bag of tomatoes sold. (4)
a) Grocer sells 1800 bags of carrots and 2500 bags of tomatoes. What is the profit or loss?
b) What is the number of bags of carrots to be sold to have neither profit nor loss if the number of bags of tomatoes sold is 900?