ATOMIC ENERGY CENTRAL SCHOOL - 5, Mumbai

PERIODIC TEST-1, JULY 2023 TIME : 1 ½ HRS

CLASS - VIII SUB- MATHEMATICS MAX.MARKS - 40

SECTION - A ( 1 × 7 = 7 Marks)

1) The rational numbers that are equal to their reciprocals?

(a) 1,0 (b) -1, 1 (c) 2,3 (d) 2,1

2) The angle of a quadrilateral are in the ratio 2:3:4:6. Find the measure of the smallest angle.

(a) 30° (b) 48° (c) 180° (d) 144°

3) If $\frac{a}{b} \times m = \frac{a}{b}$, then m = ?

(a) $\frac{-a}{b}$ (b) Zero (c) 1 (d) $\frac{a}{b}$

4) What operations are not associative for rational numbers?

(a) Addition, subtraction (b) Subtraction, Multiplication

(c) Subtraction, Division (d) Multiplication, Addition

5) Rahul draws a ball from a bag that contains white and yellow balls.The probability of choosing a white ball is $\frac{2}{9}$. If the total number of balls in the bag is 36, find the number of yellow balls.

(a) 5 (b) 42 (c) 28 (d) 8

6) The sum of additive inverse and multiplicative inverse of 2 is

(a) $\frac{3}{2}$ (b) $\frac{1}{2}$ (c) $\frac{-3}{2}$ (d) $\frac{-1}{2}$

7) Find the measure of exterior angle of a regular polygon of 9 sides.

(a) 40° (b) 35° (c) 60° (d) 50°

## SECTION - B ( 2 × 8 = 16 Marks )

8) Multiply $\frac{6}{3}$ by the multiplicative inverse of $\frac{-7}{15}$.

9) The pie chart given below shows the result of a survey carried out to find the modes of travel used by the children to go to school.

Study the pie chart and answer the questions that follow.

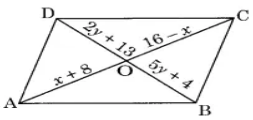

a) What is the most common mode of transport?

b) If 18 children travel by car, how many children took part in the survey?

10) Solve : 15(y-4) -2 (y -9) +5(y +6) = 0

11) Simplify using appropriate properties, $\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} + \frac{-3}{5} \times \frac{1}{6}$

12) Find the values of x and y in the given parallelogram:




13) Ankit bought 2 packs of red pens, 1 pack of blue pens, and 3 packs of black pens.The red pen pack have 4 pens each. The blue pen packs and the black pen packs have 3 pens each. He places his all pens in a pen holder. What is Ankit's probability of picking a red pen from the pen holder?

14) a = $\frac{4}{5}$ ( a + 10), Find a

15) Find the interior angle if each exterior angle of the regular polygon is 144°.

## SECTION - C. ( 3 × 3 = 9 Marks)

16) Find three rational numbers between $\frac{-2}{5}$ and $\frac{1}{4}$

17) Find the value of <DPA and < DAB


18) In a district, the number of branches of different banks is given below:

Draw a pie chart of given data.

| Bank | State Bank of India | Bank of Baroda | Punjab National Bank | Canara Bank |
|---|---|---|---|---|
| Number of Branches | 30 | 17 | 15 | 10 |

## SECTION - D

19) From a well shuffled deck of 52 playing cards, a card is selected at random. Find the probability of getting

(I) a black card (III) a card of diamond

(II) an ace. (IV) Face cards

20) In the given figure both ABCD and PBRQ are parallelograms. Find the value of p ?