



Name:	Grade :8 <sup>th</sup>	ROLL NO-
Date :	Subject: Maths (SA 1) 21 – 22	
T.Sign :	Marks: 60	

## **PART – A**

**(i) Multiple Choice Questions: [1 MARKS QUESTION] [1 X 6 = 6]**

- Which of the following is the product of  $7/8$  and  $-4/21$ ?  
a.  $-1/6$                       b.  $1/12$                       c.  $-16/63$                       d.  $-147/16$
- Which of the following is the Multiplicative identity for rational numbers?  
a. 1                      b. -1                      c. 0                      d. None of these
- Which of the following is the reciprocal of a?  
a. a                      b.  $a$                       c.  $1/a$                       d.  $-1/a$
- Two year ago my age was x years, then what was my age 5 years ago?  
a.  $X + 7$ .                      b.  $X - 2$                       c.  $X - 5$                       d.  $x - 3$
- in the interval 35-45, 35 is called  
(a) Upper limit                      (b) Lower limit                      (c) Range                      (d) None
- If the digit in one's place of a number is 3, then the last digit of its cube will be:  
(a) 3                      (b) 6                      (c) 7                      (d) 9

**(ii) Fill the blank: [1 MARKS QUESTION] [1 X 4 = 4]**

- The cubes of all even numbers between 1 and 5 are \_\_\_\_\_
- The numbers whose cube and cube root both are equal is /are \_\_\_\_\_
- Is  $x+9=d$  a linear equation? \_\_\_\_\_
- The sum of adjacent angle is a parallelogram is \_\_\_\_\_

**(iii) Tell whether the statement is true or false: [1 MARKS QUESTION] [ $\frac{1}{2} \times 6 = 3$ ]**

- A polygon having 10 sides is known as nonagon.
- A linear equation in one variable has two solutions.
- Integers cannot be represented on the number line.
- The negative of 0 does not exist.

5. In square diagonals are equal.

6. 512 is cube of even number.

(iv) Solve: Each carry one mark: [1 MARKS QUESTION]

[1 X 6 = 6]

1. Write the additive inverse of each of:  $-5/9$

2. Solve:  $7x - 9 = 16$

3. Find the range of the data: 6,14,20,16,6,5,4,18,25,15 and 5.

4. The Reciprocal of  $2/3$  is

5. What is a regular polygon? State the name of a regular polygon of: (a) 3 sides (b) 4 sides

6. The additive identity for Rational number is?

## **PART – B**

Solve: Each carry two marks (Any Seven)

[2 X 7 = 14]

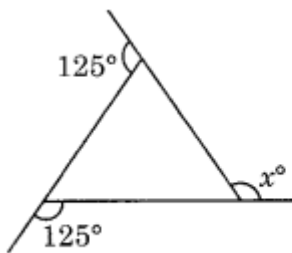
1. Write five rational numbers which are smaller than 2.

2. Sum of two numbers is 95. If one exceeds the other by 15, find the numbers.

3. Solve:  $14y - 8 = 13$

4. How many sides does a regular polygon have if the measure of an exterior angle is  $24^\circ$ ?

5. Find the angle measures in the given figure:



6.

A group of 360 people were asked to vote for their favourite season from the three seasons rainy, winter and summer.

(i) Which season got the most votes?

(ii) Find the central angle of each sector.

Season	Number of votes
Summer	90
Rainy	120
Winter	150

7. Find the square roots of 1764 by the Prime Factorisation Method.

8. Which of the following numbers are not perfect cubes:

(a) 216

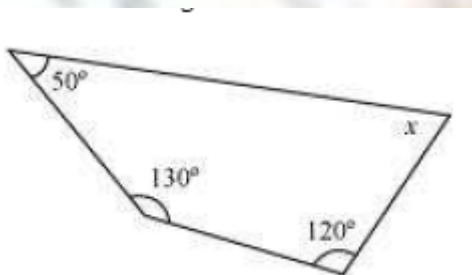
(b) 128

(c) 1000

**Solve: Each carry three marks (Any Five)**

**[3 X 5 = 15]**

1. Represent  $-2/11, -5/11$  and  $-9/11$  on the number line.
2. Solve and check result:  $4z + 3 = 6 + 2z$
3. Find the angle measures in the given figure:



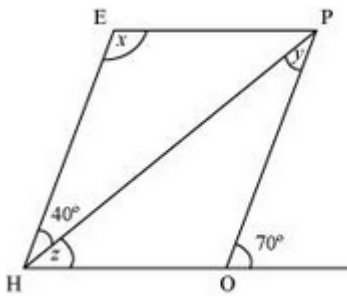
4. The shoppers who come to a departmental store are marked as: man (M), woman (W), and boy

(B) or Girl (G). The following list gives the shoppers who came during the first hour in the morning. W W G B W W M G G M M W W W W G B M W B G G M W W M M W W W M W B W G M W W W W G W M M W W M W G W M G W M M B G G W

Make a frequency distribution table using tally marks. Draw a bar graph to illustrate it.

5. The students of Class VIII of a school donated Rs 2401 in all, for Prime Minister's National Relief Fund. Each student donated as many rupees as the number of students in the class. Find the number of students in the class.

6. The adjacent figure HOPE is a parallelogram. Find the angle measures  $x$ ,  $y$  and  $z$ . State the properties you use to find them.



**Solve: Each carry four marks (Any three)**

**[4 X 3 = 12]**

1. Solve the linear equation:  $\frac{7y+4}{y+2} = \frac{-4}{3}$
2. Find the square roots of 100 and 169 by the method of repeated subtraction.
3. If you have a spinning wheel with 3 green sectors, 1 blue sector and 1 red sector, what is the probability of getting a green sector? What is the probability of getting a non-blue sector?
4. Solve the linear equation:  $\frac{3y+4}{2-6y} = \frac{-2}{5}$

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