पुष्ना International School
Shree Swaminarayan Gurukul, Zundal

HALF YEARLY (2020 - 21)					
Student's Name:		**Grade**	**VIII**	**Roll No.**	
Date:	**11/09/2020 (Friday)**	**Time**	**3 hrs.**	**Subject**	**MATHS**
Teacher's Sign.				**Total Marks**	**80**

QUESTION 1

(i) Multiple Choice Questions: [1 MARKS QUESTION] **[1 X 10 = 10]**

1. 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

2. Which of the following is the Multiplicative identity for rational numbers?

a. 1 b. -1 c. 0 d. None of these

3. Which of the following is the reciprocal of a?

a. a b. a c. 1/a d. -1/a

4. Two year ago my age was x years, then what was my age 5 years ago?

a. X + 7. b. X - 2 – 5 c. X – 5 d. x – 3

5. A simple closed curve made up of only_____is called a polygon.

(a) curves (b) line segments (c) lines (d) closed curves

6. A polygon with minimum number of sides is

(a) Pentagon (b) Square (c) triangle (d) angle

7. The difference between the highest and the lowest value of the observations in a data is called:

(a) Mean (b) Mode (c) Range (d) Median

8. in the interval 35-45, 45 is called

(a) Upper limit (b) Lower limit (c) Range (d) None

9. If the digit in one's place of a number is 2, then the last digit of its cube will be:

(a) 2 (b) 4 (c) 6 (d) 8

10. 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 10 = 10]**

1. In the pie chart the total angle of the centre of a circle is _____

2. _____ graph is useful for comparison of the data.

3. Without adding the sum of 1+3+5+7+9+11 = _____

4. Is (3,46) is a Pythagorean triplet? _____

5. The cubes of all even numbers between 1 and 5 are _____

6. The numbers whose cube and cube root both are equal is /are _____

7. Is x+9 =d a linear equation? _____

8. The value of the variable which satisfied the equation is called the _____

9. Name the polygon having minimum number of sides _____

10. The sun of adjacent angle is a parallelogram is _____

(iii) Tell whether the statement is true or false: [1 MARKS QUESTION] [1 X 10 = 10]

1. A polygon having 10 sides is known as nonagon.
2. A linear equation in one variable has two solutions.
3. Integers cannot be represented on the number line.
4. The negative of 0 does not exist.
5. Two different equation can never have the same answer.
6. In square diagonals are equal.
7. Kite is a parallelogram in which each pair of opposite sides is parallel
8. The probability of getting a number more than 7 in the throw of a die is 0.
9. 512 is cube of even number.
10. The cube of 3 ends in 7.

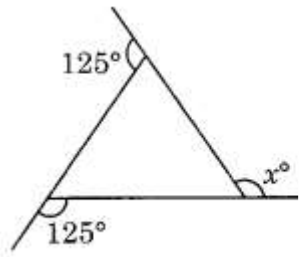
(iv) Solve: Each carry one mark: [1 MARKS QUESTION] [1 X 10 = 10]

1. Find the multiplicative inverse of. -13
2. Write the additive inverse of each of: -5/9
3. Solve: $7x - 9 = 16$
4. Solve: $4y - 8 = 13$
5. Find the range of the data: 6,14,20,16,6,5,4,18,25,15 and 5.
6. The product of two rational number is always a _____.
7. The angle measurements of a quadrilateral are 35 degree, 49degree, 67 degree .The measure of fourth angle is_____ degree
8. The Reciprocal of 2/3 is
9. What is a regular polygon? State the name of a regular polygon of: (a) 3 sides (b) 4 sides
10. The additive identity for Rational number is?

QUESTION 2

Solve: Each carry two marks (Any eight) **[2 X 8 = 16]**

1. Represent 7/4 on the number line.
2. Write five rational numbers which are smaller than 2.
3. Sum of two numbers is 95. If one exceeds the other by 15, find the numbers.
4. Solve: 14y-8=13
5. How many sides does a regular polygon have if the measure of an exterior angle is 24°?
6. Solve and check result: 5t – 3 = 3t − 5
7. Find the angle measures in the given figure:



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8.

Q2 : 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

9. Find the square of 15
10. Write a Pythagorean triplet whose one member is 6
11. Find the square roots of 1764 by the Prime Factorisation Method.
12. Which of the following numbers are not perfect cubes:
    (a) 216 (b) 128 (c) 1000

QUESTION 3

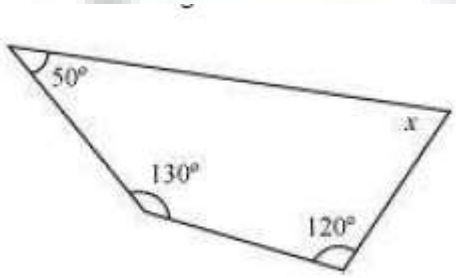
Solve: Each carry three marks (Any four) **[3 X 4 = 12]**

1. Represent -2/11,-5/11 and -9/11 on the number line.

2. Find cube root by prime factorization method 512.

3.Solve and check result: $4z + 3 = 6 + 2z$

4. Find the angle measures in the given figure:



5. 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 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.

6.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.

Solve: Each carry four marks (Any three) **[4 X 3 = 12]**

1. Find the least number which must be added to each of the following numbers so as to get a perfect square. Also find the square root of the perfect square so obtained.

(i) 525 OR (i) 1750

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: $\frac{3y+4}{2-6y} = \frac{-2}{5}$

5.Multiply 6/13 by the reciprocal of -7/13 .