

MID TERM EXAMINATION

2021

SUBJECT: MATHS

CLASS 8

Name: _____

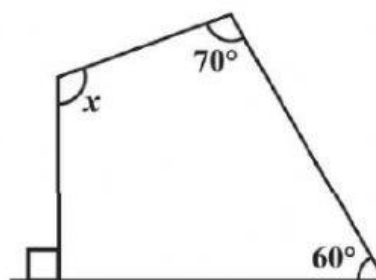
Date: _____

Marks obtained: _____

Maximum marks: _____

SECTION-A

1. Write the additive inverse of $\frac{4}{5}$
2. Solve: $7x - 9 = 16$.
3. State the name of a regular polygon of 7 sides.
4. Find x in the adjoining figure:
5. Find the square of the number 42.
6. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all?



SECTION B

1. Find two rational numbers between $-\frac{3}{2}$ and $\frac{5}{3}$
2. How many sides does a regular polygon have if the measure of an exterior angle is 24° ?
3. Find the cube root of 10648 by prime factorization method.
4. Find the smallest square number that is divisible by each of the numbers 8, 15 and 20.
5. The following marks (out of 50) obtained in Mathematics by 60 students of Class VIII:

21, 10, 30, 22, 33, 5, 37, 12, 25, 42, 15, 39, 26, 32, 18, 27, 28, 19, 29, 35, 31, 24, 36, 18, 20, 38, 22, 44, 16, 24, 10, 27, 39, 28, 49, 29, 32, 23, 31, 21, 34, 22, 23, 36, 24,
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Using tally marks make a frequency table with intervals as 0–10, 20–30 and so on.

SECTION C

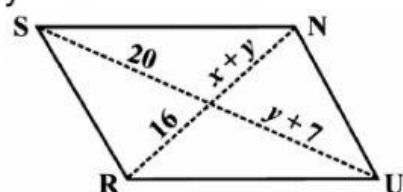
Answer any 7 of the following

1. Represent these numbers on the number line: (i) $\frac{5}{6}$ (ii) $-\frac{7}{4}$ (iii) $\frac{2}{7}$

2. Solve: $\frac{7y+4}{y+2} = \frac{-4}{3}$

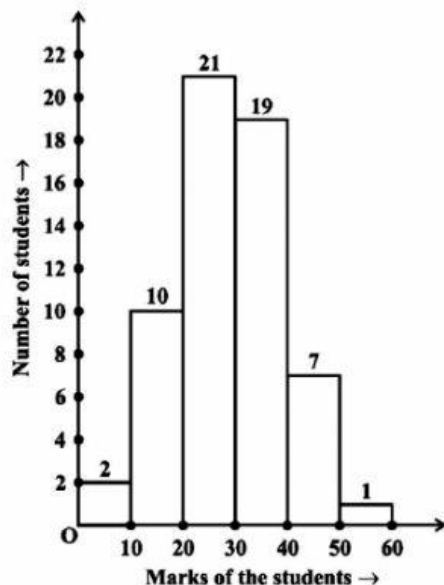
3. Find the smallest number by which 704 must be divided to obtain a perfect cube.

4. In a parallelogram RUNS, (see below Figure), find the values of x and y



5. Observe the histogram (see below Figure) and answer the questions given below.

- (i) What information is being given by the histogram?
- (ii) Which group contains maximum students and minimum students?
- (iii) How many students have score 20 marks and more?



6. A gardener has 1000 plants. He wants to plant these in such a way that the number of rows and the number of columns remain same. Find the minimum number of plants he needs more for this.

7. Find the smallest number by which 675 must be multiplied to obtain a perfect cube.
8. Solve for x: $5x + \frac{7}{2} = \frac{3}{2}x - 14$

SECTION D

Answer any 3 of the following

1. One of the two digits of a twodigit number is three times the other digit. If you interchange the digits of this two-digit number and add the resulting number to the original number, you get 88. What is the original number?
2. One of the angles of the triangle is equal to the sum of the other two angles. If the ratio of other two angles is 4:5, find measures of all angles of the triangle.
3. Solve for x: $\frac{6x+7}{3x+2} = \frac{4x+13}{2x+5}$
4. In the below Figure, BEST is a parallelogram. Find the values x, y and z.

