

Mother Teresa Mission Higher Secondary School

Holiday Homework (2019-20)

Subject- Mathematics

Class- VIII

Name- _____

I- Evaluate the following:-

- 1) Find out the value of $\sqrt{2}$
- 2) Find the least number by which 65856 should be divided to make it a perfect cube.
- 3) Find rational number between $\frac{1}{2}$ and $\frac{1}{3}$.
- 4) Use distributive property to find the value of the following.
$$\frac{3}{5} \times \frac{-20}{9} + \frac{3}{5} \times \frac{-1}{3}$$
- 5) What should be subtracted from $\frac{-5}{3}$ to get $\frac{-2}{7}$?
- 6) $\sqrt{208} + \sqrt{2304}$ is equal to
- 7) $\sqrt{3\frac{6}{25}}$ is equal to
- 8) $\sqrt{0.0016}$ is equal to
- 9) The smallest number by which 162 should be multiplied to make it a perfect square.
- 10) Value of $\sqrt{5}$ is
- 11) Find the square root of 12.0409
- 12) How many natural numbers lie between the square of 12 and 13
- 13) $\sqrt[3]{\frac{343}{2500 \times 400}}$

14) Represent $\frac{-4}{5}$ on the number line

15) $\sqrt[3]{-8000}$

16) $\frac{\sqrt{9}}{\sqrt{0.09}} + \frac{\sqrt{16}}{\sqrt{0.16}} + \frac{\sqrt{25}}{\sqrt{0.25}}$

II- Solve the following-

1) What number should be subtracted from $\frac{-7}{8}$ to get $\frac{-5}{12}$?

2) The sum of two rational numbers is 3. If one of the numbers is $\frac{7}{8}$, find the other.

3) By what number should $\frac{12}{13}$ be divided to get $\frac{2}{3}$

4) Product of two rational numbers is -6 if one of them is -8, find another.

5) Divide the sum of $\frac{2}{3}$ and $\frac{-1}{7}$ by their difference

6) $\sqrt{\frac{32.4}{28.9}}$

7) $\sqrt{\frac{0.0025}{0.0196}}$

8) $\sqrt{182 - \sqrt{156 + \sqrt{169}}}$

9) $\sqrt{2^3 \times 6^3 \times 27}$

10) Use algebraic method to find the square of 495.

11) Find the cube root of 50653.

III- Word Problems-

a) In an auditorium, the number of rows is equal to number of chairs in each row. If the capacity of auditorium is 2304.

Find the number of chairs in a row.

b) Find the greatest six digit number which is a perfect square.

c) Find the smallest perfect square divisible by 2, 3, 4 and 5.

- d) A metallic container full of wheat weighs $27\frac{1}{5}$ kg. If the empty container weighs $8\frac{1}{4}$ kg. Find the weight of wheat in the container.
- e) Ravi was asked to multiply a rational number by $\frac{2}{3}$. By mistake he multiplied the rational number $\frac{2}{9}$. His answer was $-3\frac{1}{5}$ more than the correct answer. Find the rational number.
- f) By what smallest number should 18252 be multiplied so that the product becomes a perfect cube. Also find the cube root of the product.
- g) Mr. Mukerjee's monthly salary is Rs.16000. He spends $\frac{1}{4}$ of the salary on food, out of the remaining, he spends $\frac{3}{10}$ on house rent and $\frac{5}{4}$ on the education of children. Find how much money is still left with him?
- h) In a school, the students of class 8th collected Rs.2304 for a picnic. Each student contributed as many rupees as the number of students in the class. Find the number of students in the class?
- i) There were 60 students in a class. On a rainy day, $\frac{1}{5}$ th were absent any $\frac{7}{12}$ th of those present brought raincoats. How many of them did not bring raincoat?
- j) At a cricket match, $\frac{2}{7}$ th of the spectators were in a covered stand while 15000 were in open. Find the total number of spectators.
- k) In a class of 56 students, the number of boys is $\frac{2}{5}$ th of the number of girls. Find the number of boys and girls.