

PON VIDYASHRAM SCHOOL – VALASARAVAKKAM
MATHS WORKSHEET
PERIODICAL TEST – I

Class :VIII

1. Find the smallest number by which 675 must be multiplied to obtain a perfect cube.
2. By what number should we multiply $\frac{-15}{20}$ so that the product may be 24.
3. Simplify: $\frac{3}{7} \times \frac{28}{15} + \frac{14}{5}$
4. There are 841 students in a school. If they stand in such a way that the number of students in each row is equal to the number of rows. How many students stand in each row?
5. Find $\sqrt{7744}$ by prime factorization.
6. For $a = \frac{2}{3}$, $b = \frac{-3}{4}$, $c = \frac{1}{2}$ verify that $(a \times b) \times c = a \times (b \times c)$.
7. Find $\sqrt{0.5156}$ using prime factorization.
8. Construct a quadrilateral whose two of its equal sides are 4 cm and other two are of 5cm each and one diagonal is 6 cm.
9. Find $\sqrt[3]{0.48228544}$

$$\sqrt{110592}$$

10. The sum of two numbers is $\frac{-4}{3}$. If one number is $\frac{-5}{13}$. Find the other.
11. Write four rational numbers between $\frac{1}{3}$ and $\frac{1}{2}$.
12. Tell which property allows you to complete

$$\frac{2}{3} \times \left(\frac{3}{4} \times \frac{5}{7} \right) \text{ and } \left(\frac{2}{3} \times \frac{5}{7} \right) \times \frac{3}{4} .$$

13. $\frac{1}{6}$ of the class are above average. If $\frac{1}{4}$ are average and rest are below average. If there are 48 students then how many students are below average.
14. Find the square root of 225 by the method of repeated subtraction.
15. Multiply 6561 by the smallest number so that the product is a perfect cube. Also find the cube root of the product obtained.
16. Find the smallest number divisible by 8,9 and 10.
17. Find $\sqrt{4937284}$ by long division method.
18. Is 9720 a perfect cube? If not find the smallest number by which it should be divided to get a perfect cube.
19. Find the Pythagorean triplet, one of whose number is 14.
20. Verify:

$$\left(\frac{3}{4} + \frac{-2}{5} \right) + \left(\frac{-7}{10} \right) = \frac{3}{4} + \left(\frac{-2}{5} + \frac{-7}{10} \right).$$
