

PSBB LEARNING LEADERSHIP ACADEMY
BANGALORE

Class 8

MATH – CUBES and CUBE ROOTS

WA -8 – 03/09/2021

1. Find the cube of the following

$[a] \frac{1}{2}$

$[b] 2\frac{7}{9}$

$[c] 54$

$[d] [-1]$

$[e] 4.3$

2. Find $[a] \sqrt[3]{6859}$ $[b] \sqrt[3]{24 \times 36 \times 80 \times 25}$ $[c] \sqrt[3]{\frac{3375}{125}}$ $[d] \sqrt[3]{1.331}$

3. Show that 1944 is not a perfect cube.

4. Find the smallest number by which 10985 should be divided so that the quotient is a perfect cube.

5. Find the smallest number by which 200 should be multiplied to make it a perfect cube.

6. Evaluate

$[a] \sqrt[3]{4^3} \times \sqrt[3]{6^3}$

$[b] \sqrt[3]{1000} + \sqrt[3]{0.008} - \sqrt[3]{0.125}$

$[c] \sqrt[3]{0.1 \times 0.1 \times 0.1}$

7. What is the square root of cube root of 46656?

8. Find the volume of a cube, if the area of one face is 64cm^2 .

9. Verify the statement "The cube of natural number which is a multiple of 3 is a multiple of 27".

10. If the cube of a squared number is 729, find the square root of that number.

11. Three numbers are in the ratio 2:3:4. The sum of their cubes is 33957. Find the numbers.

12. Estimate the cube root of the following numbers and verify $[a] 389017$ $[b] 226981$

13. A cube shaped cake whose edge is 20cm. It has to be cut into small cubes of edge 5cm each. How many cubes will you get?

14. A match box measures 4cm, 2.5cm, and 1.5cm. If the match boxes are stacked to form a big cube, find the dimension of the cube formed.

15. How many cubes are required to make a cube of edge 3units?

