



# CUBE & CUBE ROOTS

Worksheet 3

$$\sqrt[3]{a}$$

**SUCCESS IS THE SUM OF SMALL EFFORTS, REPEATED**

1 2 3 4

1. By what least number 3600 be divided to make it a perfect cube?

- A. 9                      B. 50                      C. 300                      D. 450
- 

2. Find the one's digit of the cube of 53.

- A. 3                      B. 4                      C. 7                      D. 9
- 

3. Evaluate:  $\sqrt[3]{0.729} \div \sqrt{0.0009} \times (0.25)^{\frac{1}{2}} - \sqrt[3]{3.375}$

- A. 135                      B. 1.35                      C. 0.135                      D. 13.5
- 

4. Cube root of a number when divided by the smallest prime number gives square of the smallest prime number. Find the number.

- A. 512                      B. 8                      C. 64                      D. 125
- 

5. Find the smallest number by which 375 must be multiplied to obtain a perfect cube.

- A. 7                      B. 11                      C. 9                      D. 5
- 

6. If  $\sqrt[3]{-2744} \div \sqrt[3]{0.008} = x$ , then the value of x is \_\_\_\_\_.

- A. 70                      B. -70                      C. 14                      D. -14
- 

7. Evaluate the cube root of:  $\frac{686}{1024}$

8. Given that  $\sqrt[3]{99} = 4.626$ , find the value of  $\sqrt[3]{792}$ .

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9. The volume of a cubical box is 13.824 cubic meters. Find the length of each side of the box.

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10. If  $x^3 = \frac{9261}{42875}$  and  $y^3 = \frac{729}{2197}$ , then  $x + y$  is \_\_\_\_\_.

- A.  $\frac{388}{455}$                       B.  $\frac{588}{455}$                       C.  $\frac{571}{455}$                       D.  $\frac{9}{65}$
-



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# Answer Key

1.D

2.C

3.B

4.A

5.C

6.B

7.7/10

8.9.252

9.2.4 meters

10.A



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