



PRACTICE WORKSHEET

Subject: Mathematics

Class: ICSE 8th

Chapter: Cubes & Cube Roots

Worksheet: M-3

TYPE/TOPIC OF QUESTIONS: CUBE ROOTS USING PRIME FACTORISATION

Evaluate the cube roots of the following:

1. $\sqrt[3]{64}$
2. $\sqrt[3]{343}$
3. $\sqrt[3]{729}$
4. $\sqrt[3]{1728}$
5. $\sqrt[3]{9261}$
6. $\sqrt[3]{4096}$
7. $\sqrt[3]{8000}$
8. $\sqrt[3]{3375}$
9. $\sqrt[3]{-216}$
10. $\sqrt[3]{-512}$
11. $\sqrt[3]{-1331}$
12. $\sqrt[3]{(27/64)}$
13. $\sqrt[3]{(125/216)}$
14. $\sqrt[3]{(-27/125)}$
15. $\sqrt[3]{(-64/343)}$
16. $\sqrt[3]{1331}$
17. $\sqrt[3]{(64 \times 729)}$
18. $\sqrt[3]{(729/1000)}$
19. $\sqrt[3]{(-512/343)}$
20. $\sqrt[3]{6859}$

TYPE/TOPIC OF QUESTIONS: FINDING THE LEAST NUMBER TO BE MULTIPLIED/DIVIDED TO GET A PERFECT CUBE USING PRIME FACTORISATION METHOD

7. Find the smallest number by which 11979 must be multiplied so that the product is a perfect cube.
8. Find the smallest number by which 8575 must be multiplied so that the product is a perfect cube.
9. What is the smallest number by which 108 must be divided so that the quotient is a perfect cube?
10. Find the smallest number by which 33275 must be divided so that the quotient is a perfect cube.
11. What is the least number by which 46305 must be divided so that the quotient is a perfect cube?
12. What least number must be multiplied to 6912 so that the product becomes a perfect cube?