

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

CLASS: VIII

SUBJECT: MATHEMATICS

DATE: 25-10-2025

Lesson 6: CUBES & CUBE ROOTS

1. Find the one's digit of the cube of each of the following numbers:
a) 672 b) 5628 c) 59 d) 2820
2. Find the cubes of the following:
a) 18 b) (-36) c) $\frac{7}{9}$
d) $\frac{-8}{15}$ e) 0.5 f) (-2.71)
3. Check whether the following numbers are perfect cubes or not?
a) 4913 b) 10000
c) 278 d) 1331
4. Find the length of each side of a cube if its volume is 512 cm^3
5. Evaluate $\sqrt[3]{8000} + \sqrt[3]{19683} - \sqrt[3]{15625}$
6. Find the smallest number by which each of the following numbers must be multiplied to obtain a perfect cube.
a) 500 b) 128 c) 1250
d) 32 e) 243
7. Find the smallest number by which each of the following numbers must be divided to obtain a perfect cube.
a) 192 b) 1000 c) 256
d) 432 e) 12288
8. Find the cube root of the following numbers by prime factorization:
a) 1728 b) 3375 c) 21952
d) 42875 e) 2197 f) 6859

Answers:

1. a) 8 b) 2 c) 9 d) 0

2. a) 5832 b) -46656 c) $\frac{343}{729}$ d) $\frac{-512}{3375}$ e) 0.125
f) -19.902511
3. a) Yes b) No c) No d) Yes
4. 8cm
5. 22
6. a) 2 b) 4 c) 100 d) 2 e) 3
7. a) 3 b) 8 c) 4 d) 2 e) 3
8. a) 12 b) 15 c) 28 d) 35 e) 13 f) 19
