**Mathematics worksheet**
**Class VIII**
**Ch.- 7 Cubes & Cube Roots**

SECTION –A (1 Mark each)

Q1. What is the length of the edge of a cube whose is 343 $cm^3$ ?

Q2. Write the cube root of - $\frac{8}{27}$.

Q3. Write the cube of $\left(\frac{-1}{2}\right)$

Q4. By what number should are multiple by 16 to get the nearest perfect cube ?

Q5. Find $\sqrt[3]{\frac{x^3}{y^3}}$.

Q6. $\sqrt[3]{6} \times \sqrt[3]{36}$=?

Q7. Cube root of a negation number is always negative. True or false.

Q8. $\sqrt[3]{x^6y^6}$ = ?

Q9. $\sqrt[3]{0.008}$ = ?

Q10. $\sqrt[3]{0.000001}$= ?

SECTION B ( 2 Mark each)

Q11. Check whether 648 is a perfect cube or net.

Q12. Final the cube root of 125 x (-64)

Q13. Evaluate $\frac{\sqrt[3]{-216}+\sqrt[3]{216}}{\sqrt[3]{27}}$

Q14. Two numbers $4x$ and $5x$ are such that sum of their cubes is 189. Find $x$.

SECTION –C (3 Marks each).

Q15. Is 832 a perfect cube ? it not, then by which smallest number should 832 be divided so that the quotient is a perfect cube?

Q16. The volume of a cube is 5832 $m^3$ find the length of its sede.

Q17. Three numbers are in the ratio 3:4:5. If the sum of their cubes is – 1728, find the three numbers.

SECTION –D (4 marks each)

Q18. Evaluate $\sqrt[3]{5\frac{1182}{2197}}$

Q19. Evaluate $\sqrt[3]{-91125 \times 512}$

Answers

| | | | |
|---|---|---|---|
| 1. | 7cm | 8. $x^2y^2$ | 15. No, 13, 64 |
| 2. | -2/8 | 9. 0.2 | 16. 18m |
| 3. | -1/8 | 10. 0.01 | 17. -6, -8, -10 |
| 4. | 4 | 11. No (Explain how) | 18. 23/13 |
| 5. | x/y | 12. -20 | 19. -360 |
| 6. | 6 | 13. 0 | |
| 7. | True | 14. 1 | |

MULTIPLE CHOICE QUESTION FOR PRACTICE.

Q1. The cube root of 125 x 64 is

a. 30 b. 20 c. 40 d. 10

Q2. Volume of cube is 343 $cm^3$, its side is

a. 9cm b. 6cm c. 9cm d. 7cm

Q3. The unit digit of cube of 7812 is

a. 8 b. 4 c. 2 d. 6

Q4. The cube root of 729 is

a. 3 b.7 c. 9 d. 4

Q5. $\sqrt[3]{36 \times 6}$ is

a. 6 b. 4 c. 16 d. 2

Q6. Cube of -1/2 is

a. ¼ b.1/8 c. -1/8 d. -8

Q7. By what number should 81 be multiplied to make it a perfect cube

a. 9 b. 1 c. 3 d. -3

Q8. Volume of cube whose edge is 4cm

(a) $64cm^3$ b. $27cm^3$ c. $2cm^3$ d. $64cm^2$

Q9. Cube root of 0.001 is

a. -0.1 b. -0.01 c. 0.1 d. -0.13

Q10. Cube root of $(-7)^3 \times (-3)^3$ is

a. -21 b. 21 c. -11 d. 10

Q11. Cube of -4/7 is

a -64/69 b. -64/49 c. -64/343 d. 64/343

Q12. Cube root of 0.001728 is

a 0.12 b. -0.12 c. -10 d. -0.0012