

Cube Roots - Problems #1-11, 16-18, 19a &19b

Name: _____ Hr: _____

Find the side length of a cube with each given volume.

1. $1,000 \text{ m}^3$

2. 1 cm^3

3. 729 ft^3

Find each cube root.

4. $\sqrt[3]{216}$

5. $\sqrt[3]{8}$

6. $\sqrt[3]{64}$

7. $\sqrt[3]{27}$

8. $\sqrt[3]{512}$

9. $\sqrt[3]{343}$

Solve each equation.

10. $x^3 = 125$


11. $x^3 = 729$

16. **Guided Problem Solving** Find the cube root of 0.008.

- Can you rename the decimal as a fraction?
- Write your answer as a decimal. Check by cubing your answer.

17. Find the cube root of 0.216.

turn page over

18. **Writing in Math**  Is 0.3 the cube root of 0.27? Explain.

- 19 a. Copy and complete the table below.

x	1	2	3	4	5	6	7	8	9	10
x^2										
x^3										

- b. Are any of the numbers both a perfect square and a perfect cube?

Write each repeating decimal as a fraction in simplest form.

1. $0.\overline{5}$

2. $0.\overline{7}$

3. $0.\overline{24}$

4. $0.\overline{15}$

5. $0.\overline{135}$