Unit 8 Lesson 13: Cube Roots

1 True or False: Cubed (Warm up)

Student Task Statement

Decide if each statement is true or false.

$\left(\sqrt[3]{5}\right)^3 = 5$

$\left(\sqrt[3]{27}\right)^3 = 3$

$7 = \left(\sqrt[3]{7}\right)^3$

$\left(\sqrt[3]{10}\right)^3 = 1{,}000$

$\left(\sqrt[3]{64}\right) = 2^3$

2 Cube Root Values

Student Task Statement

What two whole numbers does each cube root lie between? Be prepared to explain your reasoning.

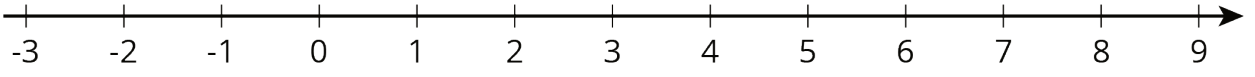
1. $\sqrt[3]{5}$
2. $\sqrt[3]{23}$
3. $\sqrt[3]{81}$
4. $\sqrt[3]{999}$

3 Solutions on a Number Line

Student Task Statement

The numbers x, y, and z are positive, and:

$x^3 = 5$ $y^3 = 27$ $z^3 = 700$



1. Plot x, y, and z on the number line. Be prepared to share your reasoning with the class.
2. Plot $-\sqrt[3]{2}$ on the number line.