

Name: Answers Date: _____ Class: _____

Square and Cube Root Practice

$\sqrt{4}$ 2 $\sqrt{25}$ 5 $\sqrt{16}$ 4 $\sqrt{144}$ 12 $\sqrt{121}$ 11 $\sqrt{100}$ 10

$\sqrt[3]{8}$ 2 $\sqrt[3]{64}$ 4 $\sqrt[3]{125}$ 5 $\sqrt[3]{216}$ 6 $\sqrt[3]{343}$ 7 $\sqrt[3]{27}$ 3

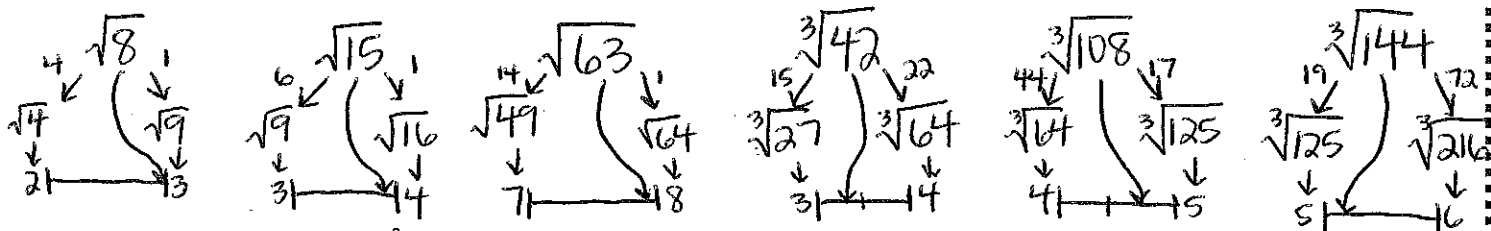
For each non perfect cube and square root below, tell which two consecutive whole numbers they would fall between.

$\sqrt[3]{12}$ 2 and 3 $\sqrt[3]{42}$ 3 and 4 $\sqrt[3]{108}$ 4 and 5 $\sqrt[3]{144}$ 5 and 6 $\sqrt[3]{350}$ 7 and 8

$\sqrt{8}$ 2 and 3 $\sqrt{15}$ 3 and 4 $\sqrt{63}$ 7 and 8 $\sqrt{78}$ 8 and 9 $\sqrt{88}$ 9 and 10 $\sqrt{134}$ 11 and 12

For each non perfect square root below, estimate to one decimal place.

$\sqrt{8}$ 2.9 $\sqrt{15}$ 3.9 $\sqrt{63}$ 7.9 $\sqrt[3]{42}$ 3.4 $\sqrt[3]{108}$ 4.7 $\sqrt[3]{144}$ 5.2



If the volume of a cube is 64cm^3 , what is the length of one side? Explain how you know.

$\sqrt[3]{\text{Volume}} = \text{side}$ $\sqrt[3]{64} = \text{4 cm}$

If the area of a square is 81in^2 , what is the length of one side? Explain how you know.

$\sqrt{\text{Area}} = \text{side}$ $\sqrt{81} = \text{9 in}$

A square shaped playground has an area of 42ft^2 , approximately how much fencing would you need to purchase to fence one side of the park? What about two sides?

6.5 feet for one side. 13 feet for two.

If $\sqrt{a} = 10$, what is a ?

$a = 100$

If $\sqrt{a} = 15$, what is a ?

$a = 225$

If $\sqrt[3]{a} = 2$, what is a ?

$a = 8$

$A = 42$

$\sqrt{42} \approx 6.5$