NAME _____

Lesson 2.3 Cube Roots

The **cube** of a number is that number multiplied by itself three times. A cube is expressed as n^3, which means $n \times n \times n$ or n cubed. The cube root of a number is the number that, multiplied by itself and by itself again, equals that number. The cube root of 27 is 3: $\sqrt[3]{27} = 3$.

The expression of a cube root is called a **radical**. The symbol $\sqrt[3]{\ }$ is called a **radical sign**. The *3* on the radical sign shows that this is a cube root.

Identify the cube root.

	a	b	c
1.	$\sqrt[3]{1{,}728} =$ _____	$\sqrt[3]{729} =$ _____	$\sqrt[3]{42{,}875} =$ _____
2.	$\sqrt[3]{3{,}375} =$ _____	$\sqrt[3]{512} =$ _____	$\sqrt[3]{15{,}625} =$ _____
3.	$\sqrt[3]{8{,}000} =$ _____	$\sqrt[3]{125} =$ _____	$\sqrt[3]{343} =$ _____
4.	$\sqrt[3]{8} =$ _____	$\sqrt[3]{64} =$ _____	$\sqrt[3]{1{,}000} =$ _____
5.	$\sqrt[3]{27} =$ _____	$\sqrt[3]{216} =$ _____	$\sqrt[3]{64{,}000} =$ _____
6.	$\sqrt[3]{125{,}000} =$ _____	$\sqrt[3]{343{,}000} =$ _____	$\sqrt[3]{216{,}000} =$ _____
7.	$\sqrt[3]{1} =$ _____	$\sqrt[3]{1{,}000{,}000} =$ _____	$\sqrt[3]{27{,}000} =$ _____
8.	$\sqrt[3]{512{,}000} =$ _____	$\sqrt[3]{729{,}000} =$ _____	$\sqrt[3]{8{,}000{,}000} =$ _____