Name_____   Date_____

Perfect Squares Chart

Standard:

MGSE8.EE.2 Use square root and cube root symbols to represent solutions to equations. Recognize that $x^2 = p$ (where p is a positive rational number and $|x| \leq 25$) has 2 solutions and $x^3 = p$ (where p is a negative or positive rational number and $|x| \leq 10$) has one solution. Evaluate square roots of perfect squares ≤ 625 and cube roots of perfect cubes $\geq$ -1000 and $\leq$ 1000.

Fill in the blanks.

n (principle root)	n^2 (perfect square)	$\sqrt{n^2}$ (positive square root)
1	$1^2 = 1 \cdot 1 = 1$	$\sqrt{1} = 1$
2		
3		
5		
		$\sqrt{49} = 7$
	$10^2 = 10 \cdot 10 = 100$	
12		
		$\sqrt{196} = 14$
15		
	$16^2 = 16 \cdot 16 = 256$	
20		
	$22^2 = 22 \cdot 22 = 484$	
		$\sqrt{625} = 25$

Perfect Cubes Chart

principle root	n^3 perfect cube	$\sqrt[3]{n}$ Positive cube root
1	$1^3 = 1×1×1 = 1$	
2	$2^3 = 2×2×2 =$	
	$3^3 = 3×3×3 =$	
		$\sqrt[3]{64}$
5		
	$6^3 = 6×6×6 =$	
7		
		$\sqrt[3]{512}$
9		
10		
-1	$-1^3 = -1×(-1)×(-1) = -1$	$\sqrt[3]{-1}$
-4		
	$-6^3 = -6×(-6)×(-6) = -216$	$\sqrt[3]{-216}$
-8		
		$\sqrt[3]{-1000}$