Squares and Square Roots (A)

Instructions: Find the square root or square of each integer.

$\sqrt{256} =$	$\sqrt{4} =$	$\sqrt{169} =$	$\sqrt{100} =$
$\sqrt{121} =$	$\sqrt{196} =$	$\sqrt{16} =$	$\sqrt{64} =$
$\sqrt{1} =$	$\sqrt{9} =$	$\sqrt{49} =$	$\sqrt{144} =$
$\sqrt{225} =$	$\sqrt{81} =$	$\sqrt{25} =$	$\sqrt{36} =$
$11^2 =$	$13^2 =$	$14^2 =$	$10^2 =$
$12^2 =$	$1^2 =$	$15^2 =$	$6^2 =$
$9^2 =$	$3^2 =$	$4^2 =$	$16^2 =$
$8^2 =$	$7^2 =$	$5^2 =$	$2^2 =$

Cubes and Cube Roots (A)

Instructions: Find the cube root or cube of each integer.

$\sqrt[3]{1728} =$	$\sqrt[3]{343} =$	$\sqrt[3]{1} =$	$\sqrt[3]{2197} =$
$\sqrt[3]{64} =$	$\sqrt[3]{1000} =$	$\sqrt[3]{729} =$	$\sqrt[3]{125} =$
$\sqrt[3]{512} =$	$\sqrt[3]{2744} =$	$\sqrt[3]{1331} =$	$\sqrt[3]{4096} =$
$\sqrt[3]{8} =$	$\sqrt[3]{3375} =$	$\sqrt[3]{216} =$	$\sqrt[3]{27} =$
$9^3 =$	$15^3 =$	$12^3 =$	$3^3 =$
$1^3 =$	$14^3 =$	$8^3 =$	$5^3 =$
$13^3 =$	$6^3 =$	$2^3 =$	$4^3 =$
$11^3 =$	$10^3 =$	$7^3 =$	$16^3 =$

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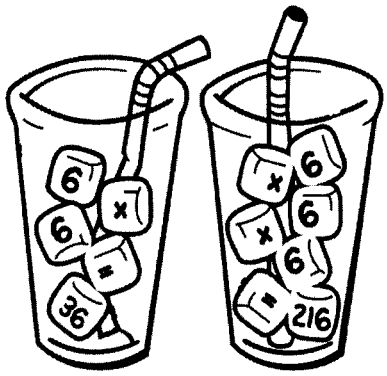
The **square** of a number is the number times itself.

$5^2 = 5 \times 5 = 25$

The **cube** of a number is the number multiplied twice by itself.

$5^3 = 5 \times 5 \times 5 = 125$



Write the **square** or **cube** of each number.

A. 4^2 =	$4 \times 4 = 16$	9^2 =	3^3 =
B. 6^3 =		7^2 =	15^3 =
C. 10^3 =		5^3 =	14^2 =
D. 20^2 =		24^3 =	19^3 =
E. 8^3 =		13^2 =	48^2 =
F. 17^2 =		25^3 =	37^2 =

Write the **square** root.

G. 36 = 6^2	64 = ____	81 = ____	25 = ____	324 = ____	529 = ____
H. 100 = ____	49 = ____	4 = ____	16 = ____	121 = ____	1,600 = ____
I. 400 = ____	225 = ____	625 = ____	144 = ____	900 = ____	2,500 = ____

Write the **cube** root.

J. 125 = 5^3	1,000 = ____	64 = ____	27 = ____	8 = ____	216 = ____
K. 512 = ____	1,728 = ____	2,744 = ____	343 = ____	8,000 = ____	6,859 = ____

Math 8

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Block: _____

Squares, Cubes and Roots
The link to shapes and 3D objects

1. Calculate the area for each square, given the side length. Show your work.

	Side length	WORK	Area
a	3 cm		
b	12 cm		
c	4.5 mm		
d	8.4 m		

2. Calculate the side length for each square, given the area. Show your work.

	Area	WORK	Side length
a	36 m^2		
b	196 cm^2		
c	6.25 m^2		
d	0.0361 mm^2		

3. Calculate the volume for each cube, given the side length. Show your work.

	Side length	WORK	Volume
a	8 m		
b	15 cm		
c	0.25 m		
d	1.7 cm		

2. Calculate the side length for each cube, given the volume. Show your work.

	Volume	WORK	Side length
a	729 mm^3		
b	5832 m^3		
c	35.937 cm^3		
d	1.728 m^3		