

Name:

Block:

### Intro to Geometry 1 - Squares, Cubes, and Roots

Check your answers against those on my website as you work! Don't wait until you're done.

**List the square and cube of each number:**

#	1	2	3	4	5	6	7	8	9	10	11	12
Square												
Cube												

**Use the above table to *estimate* the following values to one decimal place, then check:**

Square root of 6

Square root of 30

Square root of 24

Square root of 110

Square root of 52

Square root of 40

Square root of 34

Square root of 11

Square root of 99

Cube root of 9

Cube root of 75

Cube root of 100

Cube root of 23

Cube root of 45

Cube root of 400

**Use square roots and cube roots to solve the following algebra problems:**

$$A^2 = 16$$

$$B^3 = 27$$

$$C^2 = 31$$

$$D^3 = 49$$

$$E^2 + 7 = 16$$

$$F^2 - 4 = 21$$

$$G^3 - 19 = 45$$

$$2H^2 = 200$$

$$3J^2 - 2 = 190$$

$$2K^3 + 11 = 65$$

$$L^2 + 14^2 = 19^2$$

$$2M^2 - 18 = 16^2$$

$$N^2 - 31 = 8^3$$

**What is the area of a square with side length 18cm? What if its side length is 7m?**

**What is the side length of a square with area 200cm<sup>2</sup>? What if its area is 15m<sup>2</sup>?**

**What is the volume of a cube with side length 10cm? What if its side length is 2m?**

**What is the side length of a cube with volume 45cm<sup>3</sup>? What if its volume is 225m<sup>3</sup>?**