**Math 9 Note**s Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Square Roots** Day \_\_\_ Period \_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain how the diagram below represents .



Draw a diagram to represent .

**To determine the area of a square we multiply the side length by itself.**

**To determine the side length of a square we take the square root of its area.**

A **perfect square** can be expressed as the product of two equal numbers.

* List the first 12 perfect squares.
* Determine the square root of each number below.

0.09

6.25

**Non-perfect squares:**

To estimate the value of a non-perfect square, determine the closest perfect square above and below the number.

**Example:** Estimate .

Step 1: The two closest perfect squares are \_\_\_\_\_ and \_\_\_\_\_.

Step 2: is closer to the perfect square \_\_\_\_\_\_.

Step 3: Estimate the value of \_\_\_\_\_\_\_\_\_\_

* **Estimate the value of the following non-perfect squares:**

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* **Pythagorean theorem review**

8cm

12cm

Homework: p. 78 #’s 5,6,8,10,15,17,19