

## Math 9 Section 1.2 – Square Roots

**Homework:** Section 1.2 on Pg. 10; 1-2all, 3 Left, 4ab, 6, 7, 8, 10, 12, 13 – Answers on Pg. 361

*(Use calculator for questions with decimals)*

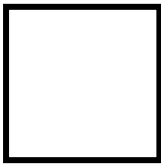
When we went over the grade 8 exam, I told you that:

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In other words, \_\_\_\_\_ and \_\_\_\_\_ are opposites!

*(Like adding/subtracting or multiplying/dividing)*

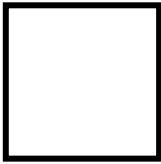
... But why?



Area = A =

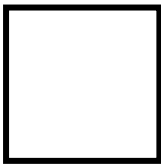
Perimeter = A =

For example:



Area = A =

What if we start with the area?



Area = A =

In Summary:

#1.

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AND

#2.

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#1. → #2.

#2. → #1.

This shows that, \_\_\_\_\_ and \_\_\_\_\_ are opposites!

**Perfect Squares – Any \_\_\_\_\_ number squared!**

$0^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 0$
$1^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 1$
$2^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 2$
$3^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 3$
$4^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 4$
$5^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 5$
$6^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 6$
$7^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 7$
$8^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 8$
$9^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 9$
$10^2 = \underline{\quad}$	$\sqrt{\underline{\quad}} = 10$

Let's try some problems with roots...

$$\sqrt{\frac{49}{121}}$$

$$\sqrt{16 + 9}$$

$$\sqrt{16} + \sqrt{9}$$

$$\sqrt{-100}$$

$$-\sqrt{100}$$

$$\sqrt{0.81}$$

What happens if we take the square root of a number that isn't a perfect square?

$$\sqrt{12}$$

$$\sqrt{78}$$

$$-\sqrt{97}$$