Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_

**7.1A NOTES – Finding Square Roots**

*Objective: Apply areas and side lengths of squares to finding the square root of perfect squares. (CC.SS.8.EE.2;MP6 Attend to Precision)*

*HW: (7.1A) p. 292 #1, 4, 5, 7 – 19 (Solutions on p. A31)*

**Find the area, *A*, of the squares given the side length, *s*. (A = s2)**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. s = 10   A = \_\_\_\_ | 2. s = 12   A = \_\_\_\_ | 3. s = 20   A = \_\_\_\_ | 4. s = 14   A = \_\_\_\_ |
| 5. s = 0.5   A = \_\_\_\_ | 6. s = $\frac{2}{3}$   A = \_\_\_\_ | 7. s = 1.5   A = \_\_\_\_ | 8. s = $1\frac{1}{3}$   A = \_\_\_\_ |

$\rightarrow $ESSENTIAL QUESTION: How can you find the area of a square when given the square’s dimensions?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Find the side of the square, *s*, when given the area of the square, *A*.**

|  |  |  |  |
| --- | --- | --- | --- |
| 9. A = 25    s = \_\_\_\_ | 10. A = 16    s = \_\_\_\_ | 11 A = 121    s = \_\_\_\_ | 12. A = 225    s = \_\_\_\_ |
| 13. A = $\frac{1}{4}$    s = \_\_\_\_ | 14. A = 1    s = \_\_\_\_ | 15. A = 0.64    s = \_\_\_\_ | 16. A = $\frac{4}{25}$    s = \_\_\_\_ |

$\rightarrow $ESSENTIAL QUESTION: How can you find the dimensions of a square when you are given its area?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **BACK 🡪**

**7.1A (p. 288) – FINDING SQUARE ROOTS**



**READ P. 290 EXAMPLES 1 AND 2. FILL IN THE BLANKS AND DO “ON YOUR OWN” #1 – 6**

VOCABULARY:

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a number with integers as its square roots.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is this symbol, $\sqrt{}$ (It is used to represent a square root.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the number under the radical sign.

An \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the small number that is sitting on top of the radical sign. $\sqrt[2]{} $

$$The square root is the only one that can be written in two ways: \sqrt{} or \sqrt[2]{}$$

**FROM EXAMPLE 1**

|  |  |  |
| --- | --- | --- |
| Positive Square Root, $\sqrt{}$ | Negative Square Root, $-\sqrt{}$ | Both Square Roots, $\pm \sqrt{}$ |
| $$\sqrt{16}= \\_\\_\\_\\_\\_\\_\\_$$ | $$-\sqrt{16}= \\_\\_\\_\\_\\_\\_\\_$$ | $$\pm \sqrt{16}= \\_\\_\\_\\_\\_\\_\\_\\_\\_\\_$$ |

**ON YOUR OWN**

Find the TWO SQURE ROOTS of the number.

|  |  |  |
| --- | --- | --- |
| 1. $36$
 | 1. $100$
 | 1. $121$
 |

Find the SQUARE ROOT(S)

|  |  |  |
| --- | --- | --- |
| 1. $-\sqrt{1}$
 | 1. $\pm \sqrt{\frac{4}{25}}$
 | 1. $\sqrt{12.25}$
 |

**WARM-UP**

$1) -7∙-7= \\_\\_\\_\\_\\_$ $2) 7∙7= \\_\\_\\_\\_\\_ $ $3) -7∙7= \\_\\_\\_\\_\\_$

 RM-UP SQUARE ROOTOOTSsswork not talk a lot.eed

Video to watch: [https://www.khanacademy.org/math/algebra/rational-exponents-and-radicals/alg1-radicals/v/introduction-to-square-roots](https://ex2010.sandi.net/owa/redir.aspx?C=aBhp8jPp5RaryWS9n_t-ZHacFtM_dFWLbJLECs5bFlXP1MOAmyjWCA..&URL=https%3a%2f%2fwww.khanacademy.org%2fmath%2falgebra%2frational-exponents-and-radicals%2falg1-radicals%2fv%2fintroduction-to-square-roots)