Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_ Period: \_\_\_\_\_Date: \_\_\_\_\_\_\_

**7.1B NOTES – Finding Square Roots**

*Objective: Evaluate expressions using square roots. (8.EE.2)*

*HW: (7.1B) p. 292 #2, 6, 20 – 32 all*

**You will be presented with TWO kinds of rational radicals (fractions under square root sign)**

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| **Quotient (Numerator ÷ Denominator) is a PERFECT SQUARE**Example: $\sqrt{\frac{98}{2}}$  | **Numerator and Denominator of Fraction are BOTH Perfect Squares**Example: $\sqrt{\frac{64}{81}}$ |

**Copy the examples from the textbook and Video Tutors in B.I.M.**

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| **7.1, Example 3 (p. 291)**Evaluate each expression1. $5\sqrt{36}+7$
2. $\frac{1}{4}+ \sqrt{\frac{18}{2}}$
3. $\left(\sqrt{81}\right)^{2}-5$
 | **Video Tutor 7.1, Example 3**Evaluate each expression1. $2\sqrt{144}-30$
2. $\sqrt{\frac{36}{4}}+ \frac{1}{6}$

 1. $49- \left(\sqrt{49}\right)^{2}$
 |

On Your Own problems #7 – 10 (p. 291). DIRECTIONS: Evaluate the expression.

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| 7. $12-3\sqrt{25}$ | 8. $\sqrt{\frac{28}{7} } +2.4$ | 9. $15- \left(\sqrt{4}\right)^{2}$ |

**BACK 🡪**

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| **7.1, Example 4 (p. 291)**The area of a crop circle is 45,216 square feet. What is the radius of the crop circle? Use 3.14 for $π$ (Area of a circle = $π∙r^{2}$)  |
| **Video Tutor 7.1, Example 4**What is the radius of the circle? Use 3.14 for $π.$ |
| **Extra Example:**The area of a circle is $625π cm^{2}$. Write and solve an equation to find the radius of the circle. |

**On Your Own**

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| 10a. The area of a circle is 2826 square feet. Write and solve an equation to find the  radius of the circle. Use 3.14 for $π.$ |
| 10b. The area of a circle is $225π in.^{2}$. Write and solve an equation to find the radius  of the circle. |
| 11a. Fill in with >, <, or =  $\sqrt{324}$ \_\_\_\_ 19 | 11b. Fill in with >, <, or =$\frac{4}{9}$\_\_\_\_\_\_ $\sqrt{\frac{9}{49}}$ |