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

**7.1B Finding Square Roots\_Classwork**

LESSON OPENER

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| --- | --- | --- |
| 1 . 3 + 8 = 11 11 – 3 = 8Provide 2 more examples of subtraction undoing addition. | a. | b. |
| 2. 5 $∙$ 3 = 15 15 $÷$ 5 = 3Provide 2 more examples of division undoing multiplication. | a. | b. |
| 3. 42 = 16 $\sqrt{16}=4$Provide 2 more examples of square root undoing a square. | a. | b. |

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| 4. Explain how a square root undoes a square. If you want to use an example, you may use one of  your examples above with your explanation. |

*Squaring a positive number and finding a square root are inverse operations. You can use this relationship to evaluate expressions and solve equations involving squares.*

**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. $\sqrt{\frac{36}{4}}+ \frac{1}{6}$
3. $49- \left(\sqrt{49}\right)^{2}$
 |

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. $15- \left(\sqrt{4}\right)^{2}$ |

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| **7.1, Example 4 (p. 291)**  |
| **Video Tutor 7.1, Example 4**What is the radius of the circle? Use 3.14 for $π.$ |

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.  |

**HW: 7.1B Homework (handout)**

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