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

**7.4B NOTES – Estimating Square Roots**

*Objective: Approximate square roots (pre-req. for CCSS 8.NS.2)*

*HW: (7.4B) p. 313 #20 – 23, 26 – 31, 43 (Solutions on p. A33)*

**\*\*\* Start with LESSON LAUNCH on back \*\*\***

**SQUARE NUMBERS:** 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225, 256, 289, 324, 361, 400



|  |
| --- |
| WATCH TUTORIAL VIDEO, LESSON 7.4, EXAMPLE 2, THEN DO O.Y.O. p. 311 #4 – 7 |

**EXAMPLES:**

|  |  |
| --- | --- |
| **Estimate to the nearest (a) integer and (b) tenth.**   1. is between and .      1. Guess and check the estimate of the square root to the nearest tenth.   4.52 = 20.25  4.72 = 22.09  4.82 = 23.04 | **Estimate to the nearest (a) integer and (b) tenth.**   1. (integer) 2. (tenth) |

 ESTIMATE THE SQUARE ROOT TO THE NEAREST (a) INTEGER AND (b) TENTH.

|  |  |
| --- | --- |
| 4.   1. (integer) 2. Guess and Check   (tenth) | 5.  a) (integer)  b) Guess and Check  (tenth) |

**BACK 🡪**

|  |  |
| --- | --- |
| 6.   1. (integer) 2. Guess and Check   (tenth) | 7.   1. (integer) 2. Guess and Check   (tenth) |

ON YOUR OWN (#8 – 10)

Which number is greater? **EXPLAIN.**

|  |  |  |
| --- | --- | --- |
| **\_\_\_\_\_\_\_\_ IS GREATER BECAUSE**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **\_\_\_\_\_\_\_\_ IS GREATER BECAUSE**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **\_\_\_\_\_\_\_\_ IS GREATER BECAUSE**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

**\*\*\*\*\*\*\*\*\*\*\*\* LESSON LAUNCH \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Find a number that satisfies the diagram**

|  |  |  |
| --- | --- | --- |
| 1. k = ? | 1. m = ? | 1. n = ? |