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

**1.0C Review Order of Operations\_Classwork**

*Objective: Students will use model with mathematics (MP4).*

*HW: 10.1 Practice RP pg 206*

What is Absolute Value?

* Absolute Value is the distance from zero on a number line.
* Distance is always *positive*.
* Absolute value symbol is |$^{}$|.

For each problem you need draw a diagram to explain each answer.

|  |  |
| --- | --- |
| Example 1: |-3| | Example 2: |4| |
| Practice 1: |6| | Practice 2: |$2^{3}-9|$ |

**Study Tip:** When a number is written without an exponent, its exponent is \_\_\_.

Example: x = \_\_\_\_; 4 = \_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Example Problem for Problem 7 HW$$-\left(\frac{1}{4}\right)^{3}$$ | Example Problem for Problem 8 HW$$4+2∙(-3)^{2}$$ | Example Problem for Problem 9 HW$$|-\frac{1}{4}(1^{5}+16-2^{3})|$$ |
| Practice 1$$-\left(\frac{1}{5}\right)^{4}$$ | Practice 2$$15-3∙(-4)^{2}$$ | Practice 3$$|-\frac{1}{2}(1^{19}+4-3^{3})|$$ |

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

**1.0C “The Toothpick Squares” Activity\_Classwork**

*Objective: CC.SS.8*

Direction: Use toothpicks to build different sizes of squares and answer the following questions. Use graph paper to draw out the squares and to answer the questions.

1. Build and draw the previous square (2x2) and the next square in the pattern (4x4).
2. How many toothpicks would you need to make a 13x13 square?
3. If you have a box of 250 toothpicks, what is the largest sized square you could build?
4. If there were marshmallows connecting the toothpicks, how many marshmallows would you need for a 13x13 square?

|  |  |
| --- | --- |
| **Dimensions** | **# of Toothpicks** |
|  |   |
| 2 x 2 |   |
|  |   |
| 3 x 3 |   |
|  |   |
| 4 x 4 |   |
| . |   |
| . |   |
| . |   |
| . |   |
| . |   |
| . |   |
| 13 x 13 |   |
|  |   |
|  | 250 or less |
|  | \_\_\_\_\_\_\_\_\_ |
|  | (enter actual # here) |

Website: <https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2017/07/6-8-WIM-3-Toothpick-Squares.pdf>