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

**10.1B Basic Exponents\_Classwork**

*Objective: CC.SS.8.EE.1* *Evaluate expressions using integer exponents (MP8 Look for and Express Regularity in Repeated Reasoning)*

*HW: (10.1B) p. 414 #3 – 17 ODD, 21 – 25 ODD*

**WARM UP**

|  |  |
| --- | --- |
| 1. Describe and correct the error in evaluating the expression

 | 1. Describe the difference between

 -34 and (-3)4 |

**SCIENTIFIC CALCULATOR NOTES**

|  |
| --- |
| You can use “^” for exponents. Example: 23 = 2 ^ 3 OR Xy or Yx Example 23 = 2 Xy 3 |

EXAMPLE 2(p. 412) – Evaluate each expression

|  |  |
| --- | --- |
| 1. (-2)4
 | 1. -24
 |

Example 3 (video in Big Ideas Math (BIM)) – Evaluate each expression

|  |  |
| --- | --- |
| 1. 2 – 4 · 52
 | 1. 5 + 62 ÷ 4
 |

BACK 🡪

ON YOUR OWN (O.Y.O.) #3 – 6 (p. 413) – Evaluate the expression

|  |  |
| --- | --- |
| 1. -54
 | 1. $\left(-\frac{1}{6}\right)^{3}$
 |
| 1. $\left|-3^{3} ÷27\right|$
 | 1. 9 – 25 · 0.5
 |

ADDITIONAL EXAMPLE PROBLEMS (SIMILAR TO HW QUESTIONS)

|  |  |
| --- | --- |
| 1. Write the product using exponents

$$9 ∙9 ∙9 ∙π ∙ π$$ | 1. Evaluate the expression

$$\left|\frac{1}{2} (6- 4)^{3}\right|$$ |

HW Instruction: COPY DOWN THE PROBLEM & SHOW YOUR WORK (You do not have to show work on #3-9). CHECK YOUR ODD ANSWERS. PLACE “√” NEXT TO CORRECT ANSWERS. CIRCLE ANSWERS AND WRITE “?” IF IT IS INCORRECT AND YOU CANNOT FIND YOUR MISTAKE