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

**10.4A NOTES – Zero and Negative Exponents**

*Objective: Know and apply the properties of integer exponents to generate equivalent expressions (CCSS: 8.EE.1)*

*HW: (10.4A) p. 432 #5 – 12, 37 – 39 (odd answers on p. A40)*

**Complete the table below.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| QUOTIENT | REPEATED MULTIPLICATION FORM | VALUE AFTER SIMPLIFIED |  | QUOTIENT | QUOTIENT OF POWERS RULE | POWER |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**RULE:** Except zero, everything to the zero power equals \_\_\_\_\_\_\_\_\_\_\_\_

a0 = \_\_\_\_ 30 = \_\_\_\_\_

**PRACTICE:**

|  |  |
| --- | --- |
| 1. Simplify 30 ∙ 34 | 1. Simplify 82 ∙ 80 |
| 1. Simplify (-2)3 ∙ (-2)0 | 1. Simplify |

**BACK 🡪**

**Complete the table below.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| QUOTIENT | QUOTIENT OF POWERS RULE | POWER |  | QUOTIENT | REPEATED MULTIPLICATION FORM | VALUE AFTER SIMPLIFIED |
|  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  | |

**RULE**: To make a negative exponent positive, take the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(move numerator to denominator or denominator to numerator)

a-n = \_\_\_\_ 3-2 = \_\_\_\_\_

**PRACTICE:**

|  |  |
| --- | --- |
| 1. Evaluate 3-4 | 1. Evaluate (-5)-3 |
| 1. Evaluate | 1. Evaluate |

**WARM-UP**

|  |  |
| --- | --- |
|  |  |