**NEW OBJECTIVES:** Review the **Rules of Exponents**.

|  |  |  |
| --- | --- | --- |
| Exponent Rule: | Symbolism: | In plain English ... |
| Zero Exponent | *x*0 = 1 | All numbers (not zero) raised to the zero power equal one. |
| Negative Exponent | expneg | A negative exponent tells you that the factor is on the wrong side of the fraction bar. ( *x* is not zero). |
| Product Rule | prodrule | When multiplying, and the bases are the same, ADD the exponents. |
| Quotient Rule | quotrule | When dividing, and the bases are the same, SUBTRACT the exponents. (top exponent subtract bottom exponent) |
| Power to a Power | powrule | When raising a power to a power, MULTIPLY the exponents. |
| Product to a Power | pprule | When raising a product to a power, EACH factor gets raised to the new power. |
| Quotient to a Power | quot1 | When raising a quotient to a power, BOTH top and bottom get raised to the new power. |

**Monday, 2.17.25 No Class, Student Holiday**

**Wednesday, 2.19.25**

**Review the Exponential Rules.**

**Class Work/Homework:**

*Directions: Decide whether the following statements are TRUE or FALSE. Assume any variables represent a positive quantity.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | |  |  |  | |  | box11a | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box12 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box13 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box14 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box15 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | | |
| |  |  |  | | --- | --- | --- | |  |  |  | |  | **Look carefully!** |  | |  | box21 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box22 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | box2333 | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | boc24RR | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |  | boc25R | Top of Form   |  |  | | --- | --- | | TRUE | FALSE |   Bottom of Form | |

**Friday, 2.21.25**

**Practice:** Simplifying Exponential Expressions

**Class Work/Homework:** *Maxwell’s Mowing*