Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_ Number: \_\_\_\_\_\_\_\_\_

# 2.1c Notes – Negative Exponents

What do you think the answer to THIS BAD BOY IS?????

|  |  |
| --- | --- |
| $$2^{-3}$$ | Thoughts??? |

|  |  |  |
| --- | --- | --- |
| Exponent | What it means | Answer |
| $$3^{4}$$ |  |  |
| $$3^{3}$$ |  |  |
| $$3^{2}$$ |  |  |
| $$3^{1}$$ |  |  |
| $$3^{0}$$ |  |  |
| $$3^{-1}$$ |  |  |
| $$3^{-2}$$ |  |  |
| $$3^{-3}$$ |  |  |
| $$3^{-4}$$ |  |  |
| $$3^{-5}$$ |  |  |

SO…

Rewrite each expression with POSITIVE EXPONENTS and SIMPLIFY!

|  |  |
| --- | --- |
| Ex #1: $8x^{4}∙3x^{-2}$ | Ex #2: $2^{3}d^{3}∙2^{2}d^{-3}$ |
| Ex #3: $\frac{8^{-3}}{x^{2}}$ | Ex #4: $\frac{x^{-2}5^{4}}{x^{-3}}$ |
| Ex #5: $\frac{w^{-5}7^{-2}w^{2}}{7^{-1}w^{-6}}$ | Ex #6: $\frac{x^{8}x^{-7}}{x^{2}x^{9}x^{-12}}$ |
| Ex #7: $\frac{16b^{-3}a^{2}}{2b^{-6}a^{5}}$ | Ex #8: $\frac{-3c^{6}c^{8}}{12c^{15}c^{-9}c^{-7}}$ |