**Negative Exponent-s**

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| SOL 7.1 Student will be able to a) investigate and describe the concept of negative exponents for powers of ten. |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_

 Negative exponents for powers of 10 are used to represent numbers between \_\_\_\_\_\_\_\_\_\_\_\_.

Ex 1: Changing a number from exponential from to a fraction, we \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10-3 10-6

10-2 10-5

Ex 2: Changing a number from exponential form to a decimal, we \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10-3 10-6

10-2 10-5

We can also work backwards…

* 1. 0.0001

 $\frac{1}{10^{4}}$ $\frac{1}{10^{5}}$

Let’s fill in the chart below.

|  |  |  |
| --- | --- | --- |
| Exponential Form | Fraction | Decimal |
| 10-1 |  |  |
|  | $$\frac{1}{10^{4}}$$ |  |
|  |  | 0.0000001 |
|  | $$\frac{1}{10^{2}}$$ |  |
| 10-8 |  |  |
|  |  | 0.001 |
| 10-9 |  |  |
|  |  | 0.00001 |
|  | $$\frac{1}{10^{6}}$$ |  |

**Negative Exponent-s: HOMEWORK**

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| SOL 7.1 Student will be able to a) investigate and describe the concept of negative exponents for powers of ten. |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_

Each question should be written as a fraction, decimal, and in exponential form.

1. 10-6
2. 0.01
3. $\frac{1}{10^{3}}$
4. 0.00000001
5. $\frac{1}{10^{4}}$
6. 10-8

**Negative Exponent-s: Classwork**

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| SOL 7.1 Student will be able to a) investigate and describe the concept of negative exponents for powers of ten. |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_

Fill in the chart below.

|  |  |  |
| --- | --- | --- |
| Exponential Form | Fraction | Decimal |
| 10-1 |  |  |
|  | $$\frac{1}{10^{4}}$$ |  |
|  |  | 0.0000001 |
|  | $$\frac{1}{10^{2}}$$ |  |
| 10-8 |  |  |
|  |  | 0.001 |
| 10-9 |  |  |
|  |  | 0.00001 |
|  | $$\frac{1}{10^{6}}$$ |  |