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

**10.7C Adding and Subtracting In Scientific Notation\_Classwork**

*Objective: Apply knowledge about power rules to adding and subtracting numbers in scientific notation. CCSS: 8.EE.4*

*HW: (10.7C) page 452 #3 – 12 ALL (copy problem, show work, check solutions on p. A41)*

Video: <https://www.youtube.com/watch?v=p0zVNTko7z4>

Convert to Scientific Notation:

If you move to the \_\_\_\_\_\_\_\_\_\_\_\_, then it is a NEGATIVE exponent.

If you move to the \_\_\_\_\_\_\_\_\_\_\_\_, then it is a POSITIVE exponent.

*Write each problem in scientific notation if necessary.*

|  |  |  |
| --- | --- | --- |
| 1. 139.45 x 103

It is important to check your answer. | 1. .000945 x 10-4
 | 1. 9.45 x 105
 |

|  |
| --- |
| **Adding Subtracting Numbers in Scientific Notation:**1. When adding or subtracting numbers in scientific notation, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. If it is not the same exponents then you need to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.1. Line up the decimals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Write in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Make sure the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

*Round factor to the nearest hundredths*

|  |  |
| --- | --- |
| **Example 1: Adding With Same Exponents**(9.45 x 103) + (6.11 x 103) | **Example 2: Subtracting With Same Exponents**(8.96 x 107) – (3.41 x 107) |
| **YOU TRY 1**(7.45 x 102) + (6.11 x 102) | **YOU TRY 2**(1.45 x 10-5) – (1.11 x 10-5) |

IF you ADD an exponent, then you move to the \_\_\_\_\_\_\_\_\_\_.

It you SUBTRACT an exponent, then you move to the \_\_\_\_\_\_\_\_\_\_\_.

*Round factor to the nearest hundredths*

|  |  |
| --- | --- |
| **Example 3: Adding With Different Exponents**(2.46 x 106)+ (3.4 x 103) | **Example 4: Subtracting With Different Exponents**(5.762 x 103)– (2.65 x 10-1) |
| **Example 5: Adding With Different Exponents**(4.12 x 106) + (3.94 x 104) | **Example 6: Subtracting With Different Exponents**(9.23 x 10-3) – (2.56 x 10-5) |
| **YOU TRY 3**(1.2 x 102) + (3.94 x 103) | **YOU TRY 4**(6.12 x 10-3) + (8.94 x 10-2) |



