Exponent Rules:

If it is a power problem, you should multiply the exponents

If it is a multiplication or division problem, you should add or subtract the exponents –when subtracting, always leave the answer as a positive exponent wherever there are more of that variable

If it is an addition or subtraction problem, the exponents do not change at all

\*Think of it this way: Exponents are smaller than regular numbers. If it is a regular number, it follows the math in the problem. If it is an exponent, it does one thing easier.\*

Ex.

You try:

Negative exponents: You never want a negative exponent. To make an exponent positive, move it to the other side of the fraction (ex. if there is a negative exponent in the denominator, move it to the numerator)

Ex.

You try:

Scientific Notation: Defined a number between 1 and 10, multiplied by a power of 10

Rules: Count the # of decimal places you have to move in order to get a number between 1 and 10, and that will be the exponent on 10. If the original number is smaller than 1, the exponent will be negative; otherwise the exponent will be positive.

Ex.

You try:

Write as a standard number: Write in scientific notation: