

Chapter 6 Review

1. I'm going to ask you to simplify $\frac{x^{-5}y^3}{x^5y^2}$ and $(x^3y^9)^{-2}(x^3y^9)$. Now write out each step in words to the side of each problem.
2. Tell me the golden rule of negative exponents, including what happens to the exponent.
3. State all the rules you know about exponents so far and give an example of each. Then give an example that uses two rules in the same problem.
4. Write in words how you use scientific notation, meaning starting with a number and then changing it to scientific notation. Be sure to include the case with negative powers.
5. Starting with a number and changing it to scientific notation is something you did in the previous problem. Now give an example where you start with scientific notation and change it back to a regular number.
6. (Section 6.4) For this problem, use two different variables. Give an example that has 5 terms and can't combine anything. Now give an example that has 5 terms and can combine only 2 of them. Now give one where you can combine 2 terms and you can combine the another 2 terms.
7. Make up a few hard problems that require you to foil. Now make up a problem where the two terms in each parentheses are the same, but different sign(6.5#57). Last, make one where you have two parentheses that are the same(6.5#49).