Math 100 Lab Notebook Requirements for Chapter 5

Each item listed must have a **definition or rule written in your own words with an example**. Provide step-by-step directions when applicable. You will be able to use this notebook for every test. Everything on the tests will be covered in the notebook; however, not everything in the notebook will be on the test.

Your notebook must be kept in one notebook with no other notes included. I will review your notebook upon request and check it the week before the final (due December 8). This counts as 50% of your lab grade.

- 1. Write out each of the rules for exponents:
 - a. Product Rule
 - b. Power Rule
 - c. Power of a Product Rule
 - d. Power of a Quotient Rule
 - e. Quotient Rule
 - f. Zero Exponent Rule
- 2. What does a negative exponent mean?
- 3. How do you convert a negative exponent to a positive exponent?
- 4. How do you change a very large number from standard notation to scientific notation?
- 5. How do you change a very small number from standard notation to scientific notation?
- 6. How do you change scientific notation with a positive exponent to standard notation?
- 7. How do you change scientific notation with a negative exponent to standard notation?
- 8. What is a polynomial?
- 9. What does P(x) mean?

Each of the following may have more than one method. You may list all methods or just the one you prefer to use.

- 10. How do you add polynomials?
- 11. How do you subtract polynomials?
- 12. How do you multiply polynomials?
- 13. How do you divide polynomials?
- 14. What is the "shortcut" for squaring a binomial?
- 15. What is the "shortcut" for multiplying the sum and difference of two terms?