Math 4 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Prerequisite Algebra Skills Practice 1**  Date\_\_\_\_\_\_\_\_

1. **Multiply the following expressions:**

a.) $\left(2x+3\right)^{2}$ b.) $\left(x-2\right)\left(2x^{2}+3x-5\right)$

2. **Simplify the following expressions. *No negative exponents allowed*!**

a.) $ 2x^{2}+2x^{4}-5x^{2}+x^{4}-3x^{4}$ b.) $\left(3x^{2}y^{-2}\right)^{4}$ c.) $\frac{\left(3x^{4}y\right)^{2}x^{2}}{6x^{6}y^{4}}$

3. **Simplify the following rational expressions:**

a.)  b.)  c.) 

4. **Factor the following expressions.**

a. $x^{2}+14x+24$ b. $4x^{2}+12x$

c. $5a^{2}b-10a^{2}$ d. 

5. Write the equation of the line that has a slope of 4 and passes through the point 

6. Write the equation of the line that passes through the points and 

**Simplify the following so that it is written as **

7.  8.  9.  10.  11. 12.

**Solve the following equations for the given variable.**

13.  14. 

15.  16. 

**Solve using the zero product property.**

17.  18. 

19.  20. 