

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Algebra I

Directions: Multiply

1.  $x^7 \cdot x^{11}$

2.  $x^2 \cdot x^4$

3.  $x^6 \cdot x^5$

4.  $x^{-2} \cdot x^{11}$

5.  $x^7 \cdot x^{-3}$

6.  $x^{16} \cdot x^{12}$

7.  $x^2 \cdot x^3$

8.  $x^{-4} \cdot x^4$

Directions: Divide

1.  $x^{14} \div x^{13}$

2.  $x^8 \div x^6$

3.  $x^{10} \div x^8$

4.  $x^{-9} \div x^{-13}$

5.  $x^6 \div x^{-4}$

6.  $x^8 \div x^3$

7.  $x^8 \div x^8$

8.  $x^{17} \div x^1$

Directions: Simplify

1.  $(x^4)^2$

2.  $(y^2)^5$

3.  $(a^3b)^4$

4.  $(6x^3y^4)^2$

5.  $\left(\frac{a^2}{b^3}\right)^3$

6.  $\left(\frac{x^4}{y^5}\right)^2$

7.  $(a^3 \cdot a^2) \div a^4$

8.  $\left(\frac{x^9 \cdot x^2}{x^{11}}\right)$