Name:_____

**Remediation – Exponent Rules – Dividing Same Bases**

After you have watched the video from the wiki, you should try the following problems and then use the key to check your work. There is not a great way to check these problems with your calculator.

Directions: Please simplify the following.

1. $\frac{20x^{10}}{-4x}$ $-5x^9$

2. $\frac{30x^{12}}{-18x^{12}}$ $-\frac{5}{3}$

$x^{12-12}$

$x^0 = 1$

3. $\frac{22r^{10}}{-44r^{-7}}$ $-\frac{1}{2}r^{17}$

careful

$10-(-7)$

4. $\frac{-22a^9x^5}{11ax^2}$ $-2a^8x^3$

$9-(-3)=12$

5. $\frac{-17b^9y^5}{17b^9y^4}$ $-y$

6. $\frac{18m^9}{-10m^{-3}}$ $-\frac{9}{5}m^{12}$

7. $\frac{-b^{-3}\cdot b^7}{4b^2}$ $\frac{-b^4}{4b^2}$ $-\frac{1}{4}b^2$

8. $\frac{8ab^{10}(2a^2b)}{-6ab^{-2}}$ $\frac{16a^3b^{11}}{-6ab^{-2}}$ $-\frac{8}{3}a^2b^{13}$