

## 14 – Exponents, Oh How We Love Them

Score \_\_\_\_\_ Per \_\_\_\_\_

Simplify and justify using Laws of Exponents. Show ALL Work.

Justify with the laws of exponents each step you do

1.  $(-1.23)^0$

2.  $4^{-3}$

3.  $5yx^{-3}$

4.  $\frac{2}{a^{-3}}$

5.  $2x^2y^4 \cdot 2^3x^{-2}$

6.  $\frac{3^{-2}x^4}{3^2x^{-2}}$

$$7. (-2)^{-3}x^2y^{-7}$$

$$8. \frac{7x^0t^{-5}}{2^{-1}m^2}$$

$$9. 3^4 \cdot 3^{-7} \cdot x^0$$

$$10. (3^2x^3)^{-1}$$

$$11. 5x^0y^{-5} \cdot yx^4$$

$$12. \frac{8a^{-6}b^4}{24a^3b^{-2}}$$