

#1-6, Apply the laws of exponents - remember, only positive exponents allowed in final form.

1.  $v^{-7}$

2.  $(-4)^{-2}$

3.  $15y^{-3}$

4.  $\frac{1}{2w^{-3}}$

5.  $L^2O^{-3}V^{-2}E^{10}$

6.  $4A^{-3}L^5G^{-1}$

7.  $5^{-2}$

8.  $\frac{2x^5y^{-1}}{7x^{-4}y^3}$

#9-24, Combine all laws of exponent to simplify each expression.

9.  $\frac{2}{3}y^8e^{-3}s^{-2}$

10.  $-5m^{-3}$

11.  $(ab)^{-3}(ab)^2$

12.  $(5w^{-3}x^5)^{-2}$

13.  $(xo)(xo)(xo)^3$

14.  $(2g^{-3}h^5)^4$

15.  $(-2math)^{-1}$

16.  $\left(\frac{2x^{-9}}{3y}\right)^{-1}$

17.  $(x^2y^2)^2(x^2y)^{-2}$

18.  $\left((m^{-3})^{-2}\right)^4$

19.  $(10h^3ug^4)(-3h^{-2}u^{-3}g)$

20.  $(-4x^3)^2(5x^5)$

21.  $(4x^{-2}y)(3x^5y^{-3}z)^2$

22.  $(a^{-2}b)^{-1}(3a^2b^{-10}c^{-3})^4$

23.  $n^{-4} \cdot o^{-10} \cdot n^{-6} \cdot o^{10}$

24.  $\left(\frac{1}{2}v^3\right)\left(\frac{2}{5}v^{-4}\right)^{-1}$

