**LAWS OF EXPONENTS**

* X1 = X
* X0 = 1
* Xm Xn = Xm+n
* (Xm)n= Xmn
* X-m = 1 / Xm
* Xm / Xn = Xm-n
* (XY)m = Xm Ym
* (X/Y)n = Xn / Yn

Examples: Simplify the following.

1. z3 z9 z2
2. 7b7b5
3. (x4)(x7)
4. 7xyz(2x2y)(3y9z6)
5. 171
6. 93290
7. (53)8
8. (Y2)0
9. X-4
10. Pa / Pb
11. (9T)4
12. (6X/7Y)2
13. 8223 / 8213

**LAWS OF LOGARITHMS**