- Exponent Rules
  (X<sup>b</sup>)(Y<sup>b</sup>) = (XY)<sup>b</sup>
  - $(X^b/Y^b) = (X/Y)^b$
  - $(X^n)(X^m) = X^{n+m}$
  - $X^n/X^m = X^{n-m}$

## **Log Rules**

- log (X) + log (Y) = log (XY)
- $\log (X) \log (Y) = \log (X/Y)$
- n\*log (X) = log (X<sup>n</sup>)
- When solving a log problem, remember:
  - o log X=b can be solved as X= 10<sup>b</sup>