

## Logarithmic Scales are used in many important applications in your (yes, your) life.

Decibel Scale -

pH Scale -

Richter Scale -

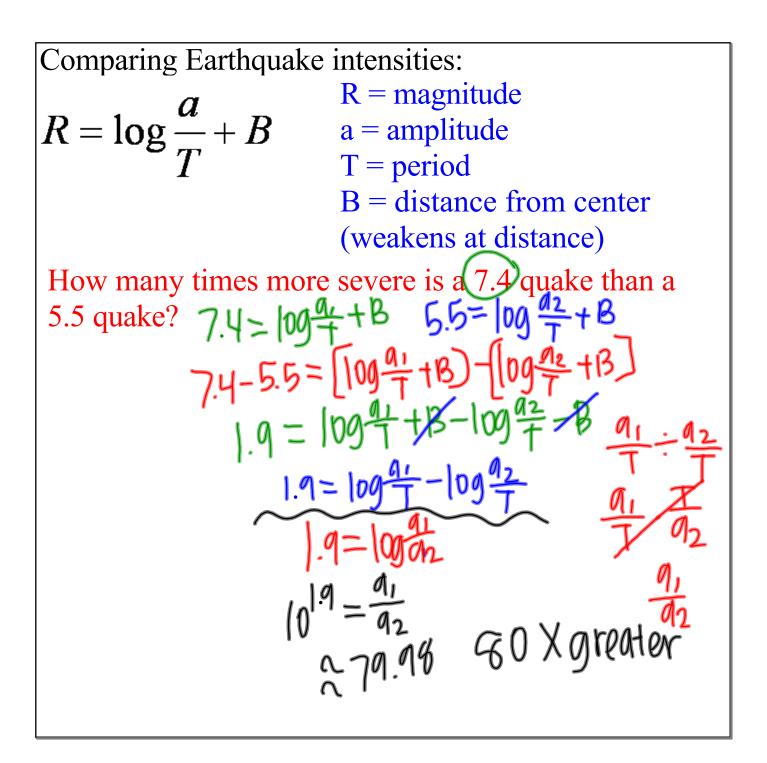
Octave Scale -

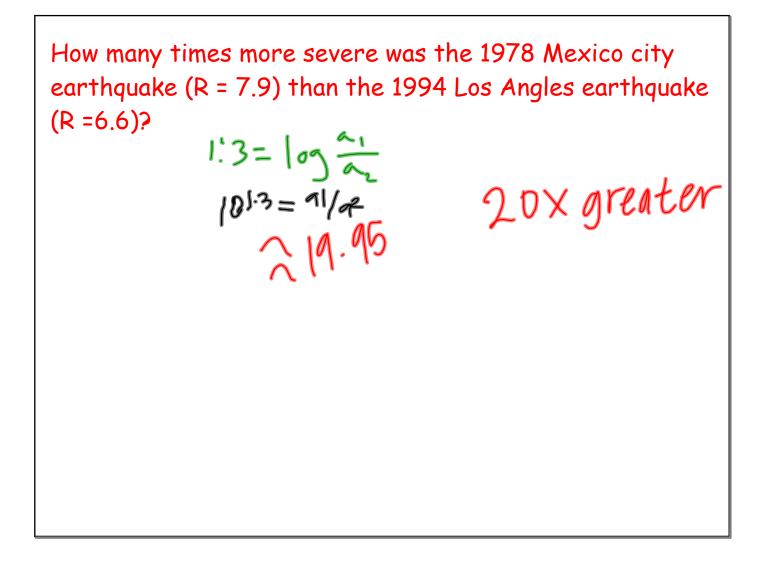
F-Scale in Photography

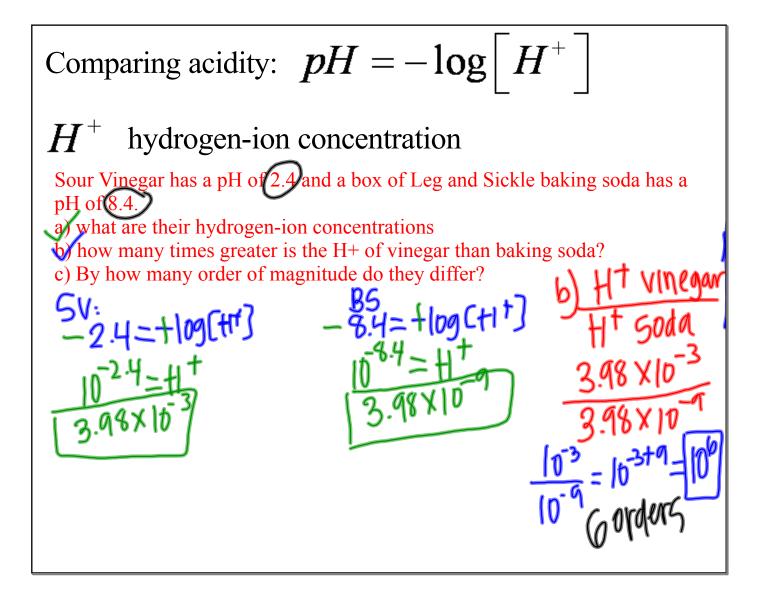
Brightness of Stars -

Ban and Deciban -

Palermo Technical Impact Hazard Scale







Carbonated water has a pH of 3.**4**9 and household ammonia has a pH of 11.9. a) what are their hydrogen-ion concentrations. b) how many times greater is the H+ of vineger than bakup soda? c) By how many order of magnitude do they differ? 3.9 = -log(Hi)  $10^{-3.9} = H^+$   $125 \times 10^{-4}$   $125 \times 10^{-4}$  $125 \times 10^{-4}$ 

