

I. Logarithm Equations, Part 2 – Examples (p.326): Exer.#6,18,32,40,46,50

II. Applications:

1. Earthquake magnitudes, star luminosity and the decibel scale each make utilize logarithms...
2. Population growth, drug concentration levels and radioactive dating all make use of exponentials...

III. Radioactive Dating (p.286): $A(t) = A_0 e^{rt}$

1. $A(t)$ is the amount of radioactive material after “ t ” years and “ r ” is the decay rate
2. $A(0) = A_0$ (*i.e.*, A_0 is the original amount)
3. Half-life: the time it takes to reduce $A(t)$ to 50% of A_0
4. Examples (p.326): Exercise #60

HW: p.326 / Exercises #1-59 (every other odd)

Read section 4.4 (pp.319-323)