

### 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 #60,62,64,66

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

pp.326-327 / Exercises #49,53,57,61-69 (odd)

Read section 4.4 (pp.322-325)