

Name:

Section 1.5 - In class example

Math 151 – Spring 2018

1. Each of the following functions gives the amount of substance present at time t . Give the amount initially present (at $t = 0$), state whether the function represents exponential growth or decay, and give the percentage growth or decay rate.

(a) $A(t) = 100(1.07)^t$

(b) $A(t) = 12(0.88)^t$.

2. Worldwide, wind energy generating capacity measured in thousands of megawatts, W was 40 in 2003 and 320 megawatts in 2006.

(a) Use the values given to write, W , in megawatts, as a linear function of t , the number of years since 2003.

(b) Use the values given to write W as an exponential function of t , the number of years since 2003. Give the annual percentage growth rate.