

Advanced Math

3-1
(Day 2)

Compound Interest and Exponential Growth/Decay

Simple Interest Formula -

Compound Interest Formula -

Continuously Compounded Interest Formula -

Exponential Growth/Decay -

- 47) Completed the table to determine the balance A for P dollars invested at rate r for t years compounded n times per year.

n	1	2	4	12	365	Continuous
A						

$P = \$2500$, $r = 12\%$, $t = 10$ years

- 51) Completed the table to determine the amount of money P that should be invested at rate r to produce a final balance of \$100,000 in t years.

t	1	10	20	30	40	50
P						

$r = 12\%$, compounded continuously

- 59) A certain type of bacteria increases according to the model

$$P(t) = 100e^{0.2197t}$$

where t is the time in hours. Find $P(0)$, $P(5)$, and $P(10)$.

Assignment: pg. 307 50, 52, 53-64 all
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