# Sequences and Series Homework –

## SEQUENCES\*

ARITHMETIC AND GEOMETRIC

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#### Abstract

An updated version of the Sequences and Series module.

#### Exercise 1

On January 1, you have 100 songs on your iPod. There after, you download three songs a day.

a. Fill in the following table.

Date: January	Number of Songs
1	100
2	103
3	106
5	
10	
d	

Table 1

**b.** Test your formula at the end (for day d) by making sure it correctly predicts that on Day 1, you have 100 songs. If it does not, fix it.

#### Exercise 2

You begin an experiment with 10 amoebas in a petrie dish. Each minute, each amoeba splits, so the total number of amoebas doubles. Fill in the following table.

<sup>\*</sup>Version 1.1: Jan 8, 2009 7:34 am -0600

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Minutes elapsed	Number of amoebas, or amoebae, or whatever they are
0	10
1	20
2	
5	
m	

Table 2