Math 155   Worksheet 1   Name:_____
Updated 7/06

Sequences – an Introduction

A sequence is a collection of numbers, beginning with an initial value and continuing to
subsequent values. Typically, we can think of a sequence as data associated with constant
time intervals. For example, we might list the high temperatures of each month in
Asheville, NC, starting with January 1997:

Jan 1997	69°F
Feb 1997	66°F
Mar 1997	75°F
Apr 1997	75°F
May 1997	83°F
Jun 1997	84°F
Jul 1997	91°F

In fact, since we know it starts on January 1997, we could just list the string of
temperatures, since the next value would correspond to the next month. The string would
look like this:

69, 66, 75, 75, 83, 84, 91, …

In essence, all sequences really have 2 sets of numbers associated with them: the actual
values, and the places in the sequence where the values appear (i.e. Is it first term? the
third term? the twenty-sixth term?) The number that we associate with where the value
appears is called the *position* and the actual value we'll call the *term*. We will always
choose the first position to be 0, which may seem strange instead of choosing 1. For the
purposes of this class, choosing the first position number to be zero will be more useful.

For example, with our sequence above, we might rewrite it like this to show both the
position number and the term:

Position	Term
0	69°F
1	66°F
2	75°F
3	75°F
4	83°F
5	84°F
6	91°F

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