CAPE MATHEMATICS worksheet
UNIT 2 MODULE 2 Lesson 1
Sequences/Recurrence Relations

1. Given a sequence $U_{n+1} = 2 + U_n, U_1 = 6$ find the first FOUR (4) terms.

2. A sequence is defined by the recurrence relation $U_{n+1} = \dfrac{2}{U_n}, U_1 = 1$, find the first FOUR (4) terms.

3. A sequence is given by the recurrence relation $U_{n+1} = \dfrac{2^{n+1}}{U_n}, \ n \geq 1, \ U_1 = 4$,

   find $U_2, \ U_3 \ and \ U_4$

4. Given the sequence defined by the recurrence relation $U_{n+1} = \dfrac{20}{U_{n-1} - 3}, U_1 = 5, U_2 = 4$, find the first FIVE (5) terms.

5. Find the first FIVE(5) terms defined by the recurrence relation
$$T_{n+1} = T_{n-1} + 2T_n, \ T_1 = 2, \ T_2 = 1$$

Prepared by Elvis Daniel http://www.vincyclassroom.com