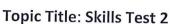
MATHEMATICS DEPARTMENT

Course: A3MAA





Student Name:

Special Instructions: No Calculators

Date: 2016

Time Allowed: 5 mins

Marks: /8

Question 1

State a recursive formula for the following sequence.

Tn+1 = 2Tn , Ti = 0.5

Question 2

Determine the first five terms for the following recursive formula

$$T_{n+1} = 3T_n$$
 , $T_1 = 4$

$$T_2 = 12$$

$$T_3 = 36$$

$$T_4 = 108$$

$$T_5 = 324$$

Question 3

A sequence is defined by:

$$T_n = 2 \times 2^{n-1}$$

Find the

a)
$$T_4 = 16$$

Question 4

Determine the general form expression for the following geometric sequence:

$$CL = 3$$
 $C = 2$

$$T_n = 3 \times 2^{n-1}$$