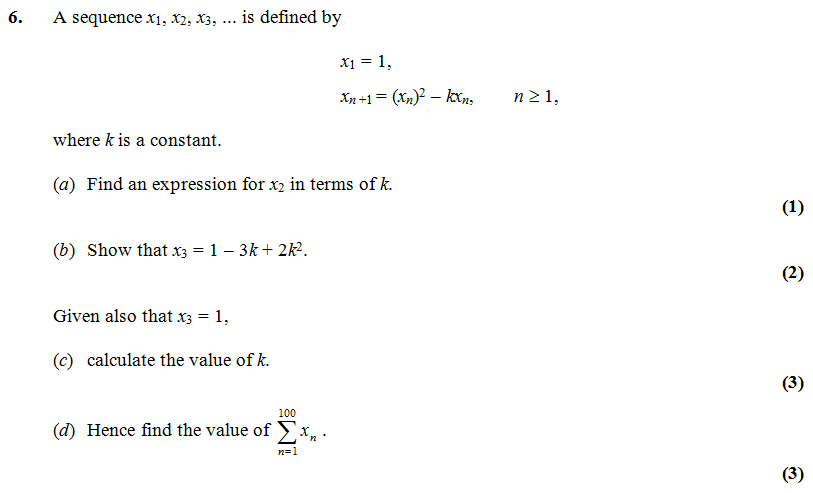
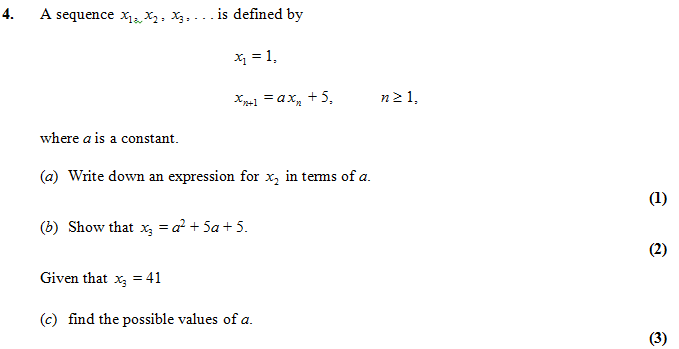
Recurrence Relations

Example



Test Your Understanding



Combined Sequences

Sequences (or series) can be generated from a combination of both an arithmetic and a geometric sequence.

Example



Extension

1. *[AEA 2011 Q3]* A sequence is given by

1. Write down the first 6 terms in the sequence.
2. Show that

means the integer part of , for example .  
Find

2. [MAT 2014 1H] The function is defined for all positive integers as follows: and for all ,

if 2 divides but 3 does not divide

if 3 divides but 2 does not divide

if 2 and 3 both divide

if neither 2 nor 3 divides .

Then the value of equals what?

3. [MAT 2016 1G] The sequence , where , is defined by and

for

Determine the value of the sum

Ex 3G Pg 80