

(C1-6.5a) Name:

Homework Questions 5 – Arithmetic Sequences

1. Find the number of terms in the following sequences if you are given the first few and the last term.

a) 12, 25, 38,155

12

b) 198, 192, 186, 180,78

21

2. Find the first term of the sequence and the common difference if

a) $U_2 = 2$ $U_5 = 17$

d=5 a=-3

b) $U_4 = -10$ $U_8 = -6$

d=1 a=-13

3. Find the 22nd term and the nth term of the following sequences

a) 5, 11, 17, 23.....

131 $U_n=6n-1$

b) 25, 21, 17, 13....

-59 $U_n=-4n+29$

4. If the first term of an arithmetic sequence is 8 and the common difference is -5. what is the 22nd term?

-97

5. An arithmetic sequence has a first term of 15 and the 8th term is 43. What are the first four terms of the sequence?

15, 19, 23, 27

6. The first two terms of an arithmetic sequence are $a+2b$ and $7b$. Find the 3rd term.

12b-a

7. What is the common difference of the arithmetic sequence with a 6th term of -56 and an 11th term of 11?

d=9

