

(C1-6.6a) Name:

### Homework Questions 6 – Partial sums of Arithmetic Sequences

1. Find the sum of the following series

a) 17, 25, 33, 41...(25 terms)

732

b) 15, 26, 37, 42....(15 terms)

906

c) 143, 130, 117, 104....(22 terms)

858

d) 96, 90.5, 85, 79.5.....(21 terms)

789

2. Find the sum of the following arithmetic sequences if you are given the first and the last term

a) 5, 19, 33, 47,.....243

N=18 2232

b) 271, 263, 255, 247, .....95

N=23 4209

c) 78, 65, 52, 39, ..... -104

N=15 -195

3. After how many terms does the sum of the sequence equal the following

a) 6, 13, 20, 27 equal 1596

21

b) 18, 44, 70, 96 equal 11850

30

4. Find the 3<sup>rd</sup> term of the arithmetic sequence if the 6<sup>th</sup> term is 24 and the 15<sup>th</sup> term is 21

$a = 25\frac{2}{3}$   $d = -\frac{1}{3}$  3rd term = 25

