

### CW 4.1 on Arithmetic Sequences

1. Given the recursive formula, find the next 2 terms.

$$f(1) = -2; f(n) = 3f(n-1) + 5$$

2. Find the 21<sup>st</sup> term given :  $f(n) = 3(n-1)^2 + 5$

3. Given  $f(n) = 3n + 23$  ; which term has a value of 266?

4. Are the following sequences arithmetic or not? Find the common difference to justify your answer.

a) 4, 9, 14, 20, ....

b) -1, 1, -1, 1, ....

c) -8, -2, 4, 10,

5. Find the recursive and explicit formulas for the following sequence: 10, 17, 24, 31, ....

6. Find the 180<sup>th</sup> term in the sequence: -5, 1, 7, 13, ....