Arithmetic Sequences

Algorithm

1. **Use the function (rule) to determine relationship between terms**
2. **Remember** **f(n – 1) - term before the nth term**
   f(n) – is the nth term of the sequence
   f(n + 1) – term after the nth term
3. **Use the common difference to determine the equation recursively.**

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1. **If a(1) = 7 and a(n + 1) = a(n) + 3, find the first three terms of the sequence**

2. **if a(1) = 6 and a(n + 1) = a(n) – 2, find the first three terms of the sequence.**

3. **If a(1) = 6 and a(n – 1) = a(n) + 5, find the first three terms of the sequence.**

4. **If Sue runs 15 minutes per day the first week of her training program and increases it by 5 minutes each week. Write a function that represents the number of minutes she is running in week n in terms of the week before.**

