# D - Sequences and series

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| **What are the 3 types of sequences?** | * Increasing - un + 1 > un * Decreasing - un + 1 < un * Periodic - un + a = un (usually has some trig function) |
| **What are the all arithmetic sequences formulae?** | Where a = first term, l = last term, d = difference. |
| **What are the all geometric sequences formulae?** | Where a = first term, r = common ratio. |
| **Limit of a sequence** | * As n → ∞, un + 1 = un = L * This substitution can be used to find the limit. |
| **Derivation of geometric sequence formula** |  |