Arthmetic Prograssion

Summary

1. General form : $a, a+2d, a+3d$ ....

2. Terms: a = initial term
   d = difference between 2 Terms

3. $d = a_2 - a_1 =, a_3 - a_2$

4. n^{th} Term:
   $$a_n = a + (n-1)d$$

5. Sum of first n Terms of A.P :
   $$S_n = \frac{n}{2} \times (2a + (n-1)d)$$
   another formula
   $$S_n = \frac{n}{2} \times (a + e)$$

6. Types of common difference

   $+d$ -> Increasing A.P
   $-d$ -> decreasing A.P
   $d=0$ -> Constant A.P