

CH 10 Outline

10.1 → Sequences/Factorials/Summations

$$a_n = 3n - \sum_{i=3}^n i!$$

10.2 → Arithmetic Sequences

$$a_n = a_1 + (n-1)d \quad S_n = \frac{n}{2}(a_1 + a_n)$$

10.3 → Geometric Sequences

$$a_n = a_1 r^{n-1} \quad S_n = \frac{a_1(1-r^n)}{1-r} \quad S_\infty = \frac{a_1}{1-r}$$

10.4 → Math Induction

10.5 → Binomial Theorem

10.6 → Combination/Permutation

10.7 → Probability