

数列の和

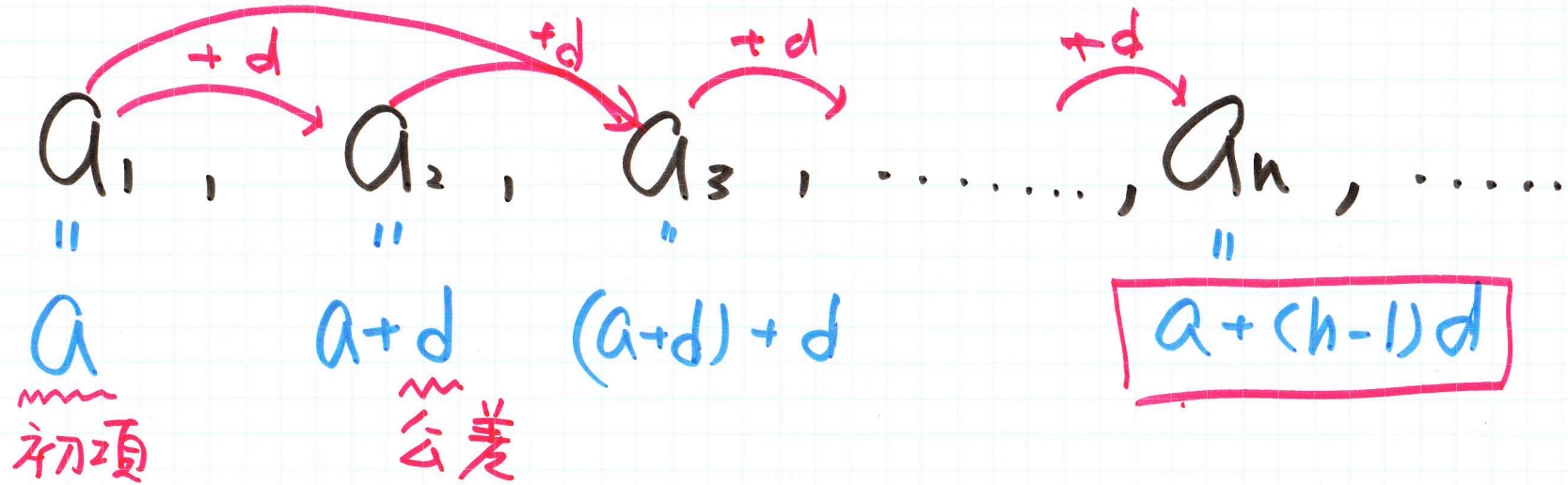
数列 $a_1, a_2, a_3, \dots, a_n, \dots$

初項から第 n 項
までの和

$$\sum_{k=1}^n a_k = a_1 + a_2 + \dots + a_n$$

Σ : 総和記号
(シグマ)

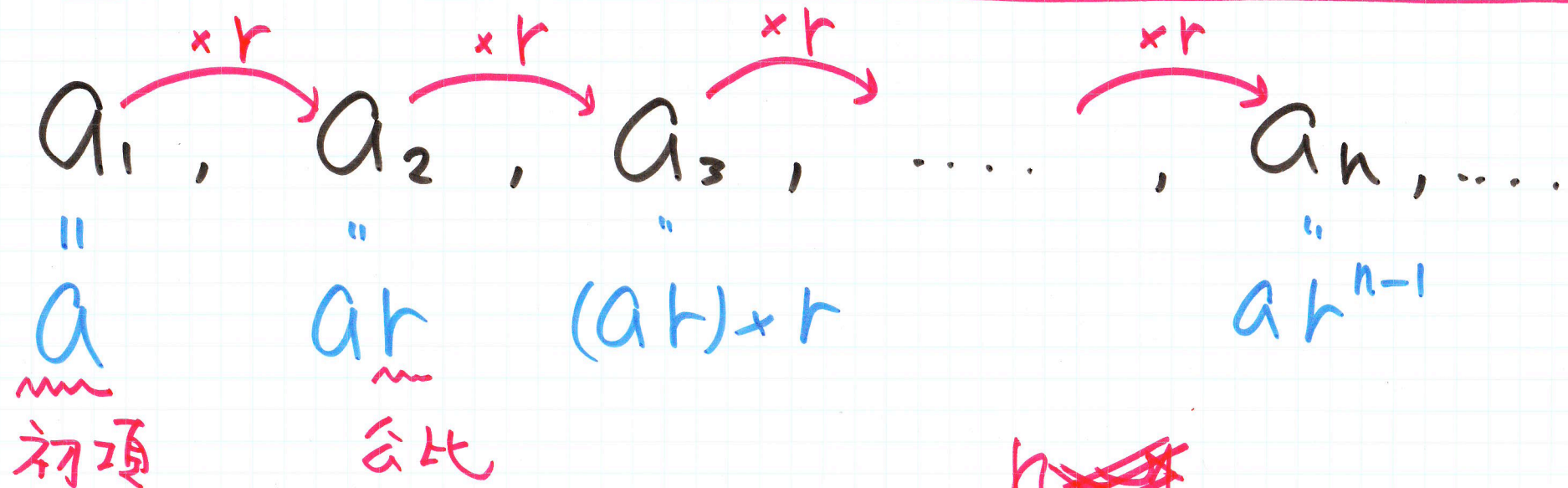
等差数列の和



$$\sum_{k=1}^n a_k = \frac{n \{ 2a + (n-1)d \}}{2}$$

$$= \frac{\{ (\text{初項}) + (\text{第 } n \text{ 項}) \} \times (\text{項数})}{2}$$

等比数列の和



$$\sum_{k=1}^n a_k = \frac{a(1-r^{n+1})}{1-r}$$

(Note: In the original image, the exponent $n+1$ is circled in red and has an arrow pointing to a crossed-out n above it.)

$(r \neq 1)$
rが1じゃないとき

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