

$$c) S_n = a + aq + \dots + aq^{n-1} \rightarrow S_n q = aq + aq^2 + \dots + aq^n$$

انحراف اولی و آخر

$$S_n - S_n q = a - aq^n \Rightarrow S_n(1-q) = a(1-q^n)$$

$$\Rightarrow S_n = a \times \frac{(q^n - 1)}{(q - 1)} = a \times \frac{(1 - q^n)}{(1 - q)} \quad \checkmark$$