* $1 + 2 + 3 + ... + n = \dfrac{n(n+1)}{2}$

* $1 + 3 + 5 + ... + (2n-1) = n^2$

* $1^2 + 2^2 + 3^2 + ... + n^2 = \dfrac{n(n+1)(2n+1)}{6}$

* $2^2 + 4^2 + 6^2 + ... + (2n)^2 = \dfrac{2n(2n+1)(2n+2)}{6}$

* $1^3 + 2^3 + 3^3 + ... + n^3 = \left(\dfrac{n(n+1)}{2}\right)^2$

* $1^5 + 2^5 + 3^5 + ... + n^5 = \dfrac{n^2(n+1)^2(2n^2+2n-1)}{12}$

* $1.2 + 2.3 + 3.4 + ... + n(n+1) = \dfrac{n(n+1)(n+2)}{3}$

* $1.2.3 + 2.3.4 + 3.4.5 + ... + (n-1)n(n+1) = \dfrac{(n-1)n(n+1)(n+2)}{4}$

* $\dfrac{1}{1.2} + \dfrac{1}{2.3} + \dfrac{1}{3.4} + ... + \dfrac{1}{n(n+1)} = 1 - \dfrac{1}{n+1} = \dfrac{n}{n+1}$

* $\dfrac{1}{1.2.3} + \dfrac{1}{2.3.4} + \dfrac{1}{3.4.5} + ... + \dfrac{1}{n(n+1)(n+2)} = \dfrac{n(n+3)}{4(n+1)(n+2)}$

* $\dfrac{3}{(1.2)^2} + \dfrac{5}{(2.3)^2} + \dfrac{7}{(3.4)^2} + ... + \dfrac{2n+1}{(n(n+1))^2} = \dfrac{n(n+2)}{(n+1)^2}$

* $1 + p + p^2 + p^3 + ... + p^n = \dfrac{p^{n+1}-1}{p-1}$

* $1 - p + p^2 - p^3 + ... + p^{2n} = \dfrac{p^{2n+1}+1}{p+1}$

* $1 + p^d + p^{2d} + p^{3d} + ... + p^{nd} = \dfrac{p^{(n+1)d}-1}{p^d-1}$

* $1 - p^d + p^{2d} - p^{3d} + ... + p^{2nd} = \dfrac{p^{(2n+2)d}+1}{p^d+1}$

* $1 + 2p + 3p^2 + 4p^3 + ... + (n+1)p^n = \dfrac{(n+1)p^{n+1}}{p-1} - \dfrac{p^{n+1}-1}{(p+1)^2}$