$$\text{五边形数}\varphi(x)=\prod_{i=1}^{n}(1-x^i)=\sum_{i=-\infty}^{+\infty}(-1)^i x^{\frac{i(3i+1)}{2}}(\text{只有前}\sqrt{n}\text{项有值})$$

$$\frac{1}{\varphi(x)}=\sum_{i=0}^{\infty}p(i)x^i=\prod_{i=1}^{\infty}\frac{1}{1-x^i}(p(i)\text{为}i\text{的拆分数})$$

$$(\frac{1}{1-x})^k=\sum_{i=0}^{\infty}C_{k+i-1}^{i}x^i$$

$$\text{约数个数}d(ab)=\sum_{i|a}\sum_{j|b}[gcd(i,j)==1]$$

$$d(i)\text{表示}i\text{二进制位的奇偶，偶0奇1}$$

$$FWT_i(A)=\sum_j(-1)^{d(i\&j)}A_j=\sum_{d(i\&j)=0}A_j-\sum_{d(i\&j)=1}A_j$$

$$\text{二项式反演}g(n)=\sum_{i=0}^{n}C_n^if(i)<=>f(n)=\sum_{i=0}^{n}(-1)^{n-i}C_n^ig(i)$$

$$g(n)=\sum_{i=n}^{N}C_i^nf(i)<=>f(n)=\sum_{i=n}^{N}(-1)^{i-n}C_i^ng(i)$$