

$$\begin{array}{ccc} |F| = q^{\deg(f)} & \longleftrightarrow & X \\ \log_q |F| = \deg(f) & \longleftrightarrow & \log X \end{array}$$

$$\sum_{\deg(f)=n} h(f)$$

$$\sum_{F \text{ prime}} \frac{h(F)}{|F|^s} = \sum_{n=0}^{\infty} \left(\sum_{\deg(F)=n} \frac{h(F)}{q^{ns}} \right) = H(n)$$

$$\zeta_A(s) = \frac{1}{1 - q^{1-s}}$$

$$\sum_{n \leq x} d(n) = x \log x + c_1 x + O(\sqrt{x})$$

$$\begin{aligned} \sum_{\deg(f)=n} d(f) &= (n+1)q^n = q^n n + q^n = \\ &= x \log_q x + x \\ q^n &= x \end{aligned}$$

$$D_{\mathbb{F}} = \sum_{n=0}^{\infty} \sum_{\deg(f)=n} \mathbb{F}(f) \frac{1}{|F|^s} = \zeta(s)^{-1} \zeta_A(s-1)$$