

$$\prod_{k \geq 1} \frac{1}{1 - q^k} = \sum_n \prod_{1 \leq j \leq n} \frac{q}{1 - q^j} = \sum_m p_m q^m$$

$$\prod_i \underbrace{1 - q^{2i}} = \sum_n (-1)^n q^{3n^2 \pm n}$$

$$\prod_{i \geq 0} \frac{1}{(1 - q^{2+5i})(1 - q^{3+5i})} = \sum_n \prod_{1 \leq j \leq n} \frac{q^{2j}}{1 - q^j}$$

$$\sum_{1 \leq j \leq n} 2j = n(n+1)$$

$$\prod_{i \geq 0} \frac{1}{(1 - q^{1+5i})(1 - q^{4+5i})} = \sum_n \prod_{1 \leq j \leq n} \frac{q^{2j-1}}{1 - q^j}$$

$$\sum_{1 \leq j \leq n} 2j - 1 = n(n+1) - n = n^2$$

$$\prod_e \underbrace{1 + q^{2^e}} = \sum_n q^n$$

$$14 = 2^3 + 2^2 + 2^1$$

$$\prod_e \underbrace{1 + q^{3^e} + q^{-3^e}} = \sum_n q^n$$

$$300 = 3^5 + 3^4 - 3^3 + 3^1$$