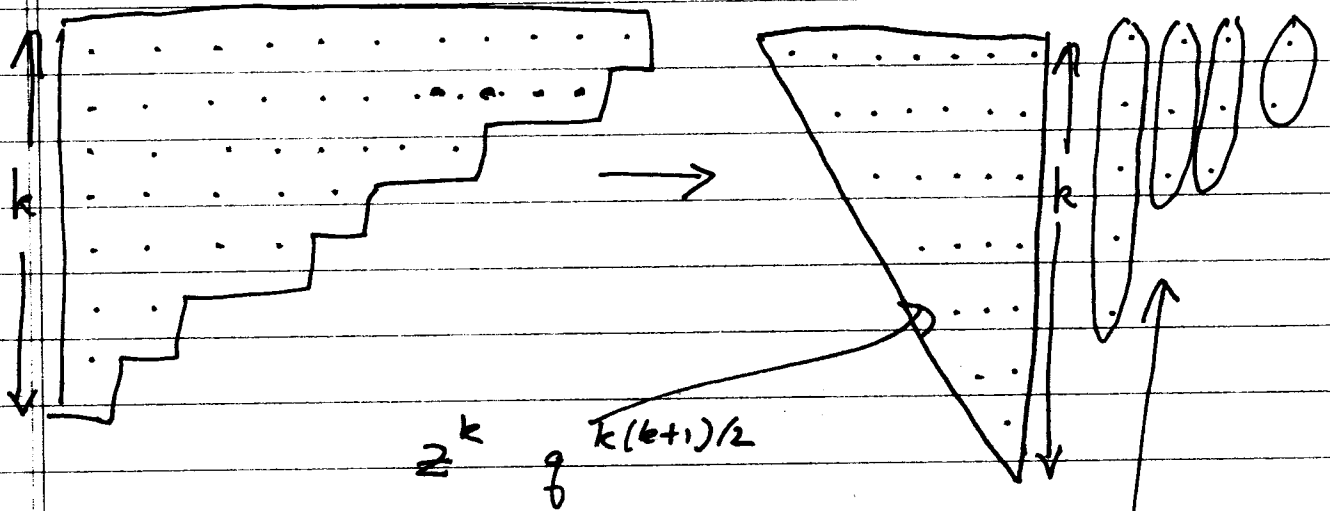


3 from next, ..., 7 from largest part
to get

$$\lambda = (4, 4, 3, 1, 1, 0, 0)$$

we obtain a partition of $n - (1+2+\dots+7)$ into
 $m \leq 7$ parts.)



$$z^k \cdot q^{k(k+1)/2}$$

$$\frac{1}{(q)_k}$$

partition into parts $\leq k$
by taking conj.

Since

$$PD = \cup PD_k \quad (\text{disjoint})$$

we have

$$\begin{aligned}
 (1 - zq)_\infty &= \prod_{m=1}^{\infty} (1 + zq^m) = 1 + \sum_{\lambda \in PD_k} z^{|\lambda|} q^{|\lambda|} \\
 &= 1 + \sum_{k=1}^{\infty} \frac{z^k q^{k(k+1)/2}}{(q)_k} \quad \square
 \end{aligned}$$