Combinatorial methods in discrete math.

Let $\sigma : [M] \to [N]$. Define the *primary configuration* as $[\sigma] \equiv [a[1]^{\alpha[1]} \dots a[n]^{\alpha[n]}]$, and $\alpha[1] + \alpha[2] + \dots + \alpha[n] = m$, where $\alpha[j] \equiv |\{m \in M : \sigma(m) = j\}|$.