Thus the total number of arrays is

$$(3.3)\quad 1 + \sum_{s=1}^{q}\binom{n+s-1}{s} + \sum_{k=2}^{\left[\frac{n+m-1}{m}\right]}\ \sum_{s=1}^{p+(k-1)\alpha}\binom{n+s-1(k-1)(m-p)+\binom{k-1}{2}\alpha+q-p}{n-(k-1)m-1}$$

We note that (3.3) can be simplified by replacing the first two terms by the right member of (3.1) and the inner sum by applying (2.8).

We note some special cases of (3.3). First the case $\alpha = 0$ is, with obvious notational changes, Roselle's $N_j(m,k)$ [2, §3]. If, in addition, we take $p = q$, Eq. (3.3) reduces to (2.5), which in turn reduces to (2.2) for $p = 1$.

As we remarked at the beginning, it is now quite clear that the description of a very general case of these types of arrays would be quite complicated. However, it is clear that in any given instance, the method used above is easy to apply.

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TAKE-AWAY GAMES

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