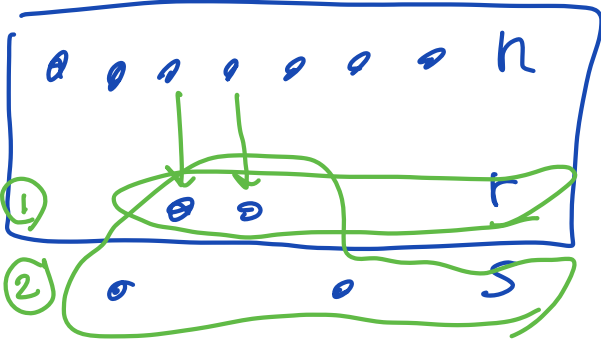
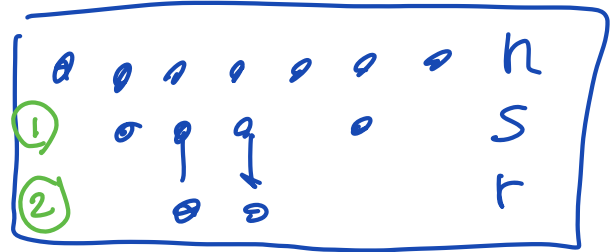


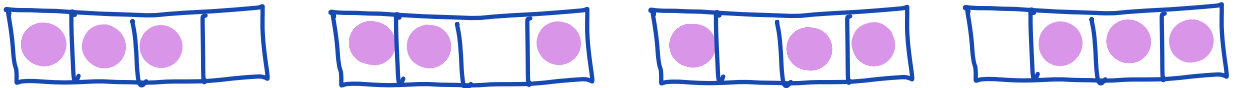
?  $\frac{\binom{n-r}{s-r}}{\binom{s}{r}} = \frac{\binom{n}{s}}{\binom{n}{r}}$   $\binom{n}{s} = \# \text{ ways to choose } s \text{ from } n \text{ and } r \text{ from } s$

$\binom{n}{s} = \binom{n}{r} \binom{n-r}{s-r} = \binom{n}{s} \binom{s}{r}$

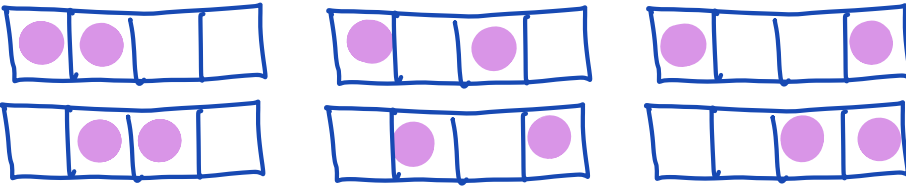


$\{n\} \supset \{s\} \supset \{r\}$

$\binom{4}{3} = 4$



$\binom{4}{2} = 6$



$\binom{4}{3} \binom{3}{2} = 4 \cdot 3 = 12$

