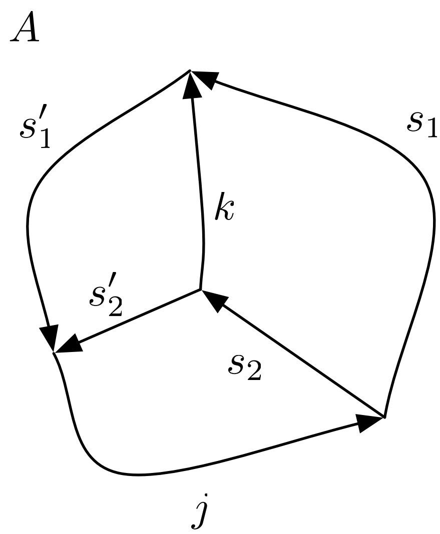


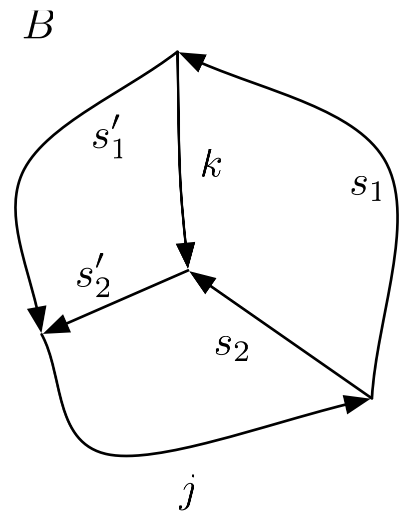


For A:

$s_1 = \begin{array}{|c|}\hline 1\\\hline\end{array}$ $\quad s_1' = \begin{array}{|c|}\hline 1\\\hline 2\\\hline\end{array}$ $\quad k = \begin{array}{|c|}\hline 2\\\hline\end{array}$

$s_2 = \begin{array}{|c|}\hline 2\\\hline 3\\\hline\end{array}$ $\quad s_2' = \begin{array}{|c|}\hline 3\\\hline\end{array}$ $\quad j = \begin{array}{|c|c|}\hline ? & ?\\\hline ? \\\cline{1-1}\end{array}$

$s_1 \otimes s_2 \to j = \begin{array}{|c|c|}\hline 1 & 2\\\hline 3 \\\cline{1-1}\end{array}$ $\qquad s_1' \otimes s_2' \to j = \begin{array}{|c|c|}\hline 1 & 3\\\hline 2 \\\cline{1-1}\end{array}$

$A = -\frac{1}{12}n(n^2-1)$ $\qquad A = \frac{1}{6}n(n^2-1)$

?

Which choice of $j$

By symmetry: B$(\mathrm{s}_1, s_2, s_1', s_2') = A(s_1', s_2', s_1, s_2)*$

For B

$s_1 = \begin{array}{|c|}\hline 1\\\hline 2\\\hline\end{array}$ $\quad s_1' = \begin{array}{|c|}\hline 1\\\hline\end{array}$ $\quad k = \begin{array}{|c|}\hline 2\\\hline\end{array}$

$s_2 = \begin{array}{|c|}\hline 3\\\hline\end{array}$ $\quad s_2' = \begin{array}{|c|}\hline 2\\\hline 3\\\hline\end{array}$ $\quad j = \begin{array}{|c|c|}\hline ? & ?\\\hline ? \\\cline{1-1}\end{array}$

Why symmetry only for sum of both

$s_1 \otimes s_2 \to j = \begin{array}{|c|c|}\hline 1 & 2\\\hline 3 \\\cline{1-1}\end{array}$ $\qquad s_1' \otimes s_2' \to j = \begin{array}{|c|c|}\hline 1 & 3\\\hline 2 \\\cline{1-1}\end{array}$

$B = 0$ $\qquad B = \frac{1}{12}n(n^2-1)$