

1. Let $S_1 = \{T_1, \dots, T_n\}$ be the set of n tensors which make up network \mathcal{N} .
2. Let c be a counter running from 2 to n . For each value of c :
 - (a) Let S_c be the set of all objects made up by contracting together c unique tensors from S_1 .
 - (b) For each pair of sets S_d, S_{c-d} , $1 \leq d \leq \lfloor \frac{c}{2} \rfloor$, and for each $T_a \in S_d$, $T_b \in S_{c-d}$ such that each element of S_1 appears at most once in $(T_a T_b)$:
 - i. Determine the cost μ of contracting T_a with T_b .
 - ii. Where T_a and/or T_b do not belong to S_1 , add to μ the previously-determined cost of constructing T_a and/or T_b as appropriate.
 - iii. Let the contraction sequence \mathcal{Q} for constructing this object be written $\mathcal{Q} = (T_a T_b)$. Where T_a and/or T_b do not belong to S_1 , optimal contraction sequences for T_a and T_b will have been previously recorded. In \mathcal{Q} , replace each appearance of T_a and/or T_b with these optimal contraction sequences.
 - iv. Locate the object in S_c which corresponds to $(T_a T_b)$. If μ is the cheapest known cost for constructing this object, record the cost μ and the associated contraction sequence \mathcal{Q} against this object.
3. The optimal cost μ_{best} and a sequence $\mathcal{Q}_{\text{best}}$ which realises this are recorded against the only element in S_n .