

$$\text{Use} \quad \text{Sp}((T_A^a)^2) = 8k_A \qquad \text{Sp}(H_i H_j) = k_A \delta_{ij}$$

$$:: \quad k_{A \otimes B} = k_B \dim A \oplus k_A \dim B$$

$$:: \quad k_{A \oplus B} = k_A \oplus k_B$$