Difference L-operators for the Q-system

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Q-systems are discrete recursion relations satisfied by the q-characters of KR-modules, finite-dimensional current algebra or quantum affine algebra modules which are used to define generalized Heisenberg spin chains. Q-systems, which can be regarded as the classical limit of the corresponding T-system, are discrete integrable systems for any Lie algebra. An efficient way to describe conserved quantities is given via difference L-matrices. We will describe these for Q-systems corresponding to the classical Lie algebras and compare these with the difference L-operators for T-systems, which generate q-characters.

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