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Generators and relations for 3-qubit Clifford+CS operators

This is a work in progress. We found a finite presentation of the group G of 3-qubit Clifford+CS operators in terms of generators and relations. The proof is easy — applying a known method to a known result. The calculation is non-trivial, which involves simplifying hundreds of long equations. Our main contribution is the simplification method. Its idea is factoring a group into a product of cosets, in other words, finding a "nice" tower of group extensions starting from the trivial group to the group in focus. The ongoing part is to check our result in proof assistant Agda.