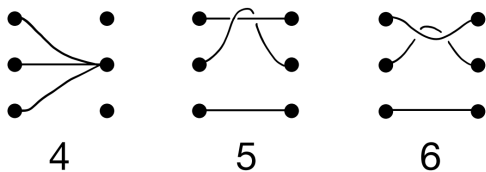
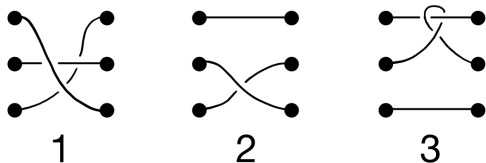




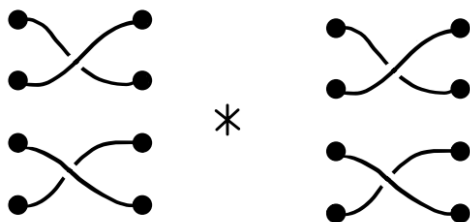
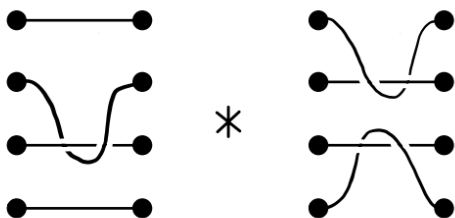
Grade 9/10 Math Circles

An Introduction to Group Theory Part 3 - Problem Set

1. Identify which of the below diagrams are 3-braids.

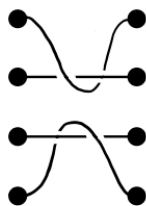
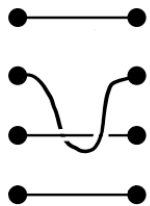


2. Compute the following two concatenations:





3. Compute the inverses of the following two braids:



4. Consider the set B_n of all n -braids, where $n \in \{1, 2, 3, \dots\}$. Is B_n finite or infinite?