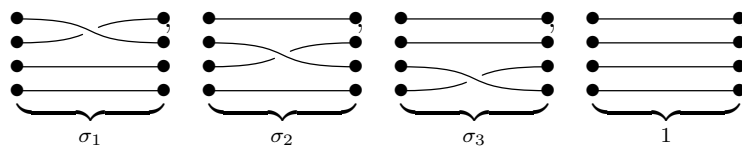The generators and the identity for B_4 are the following:

and the operation $\circ$ composes two braids identifying the objects in the middle; e.g. $\sigma_1 \circ \sigma_2$ is the following: