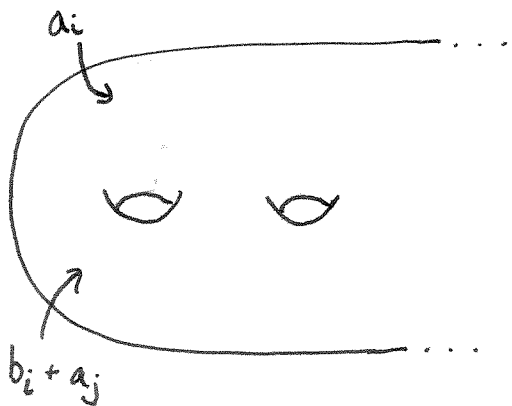
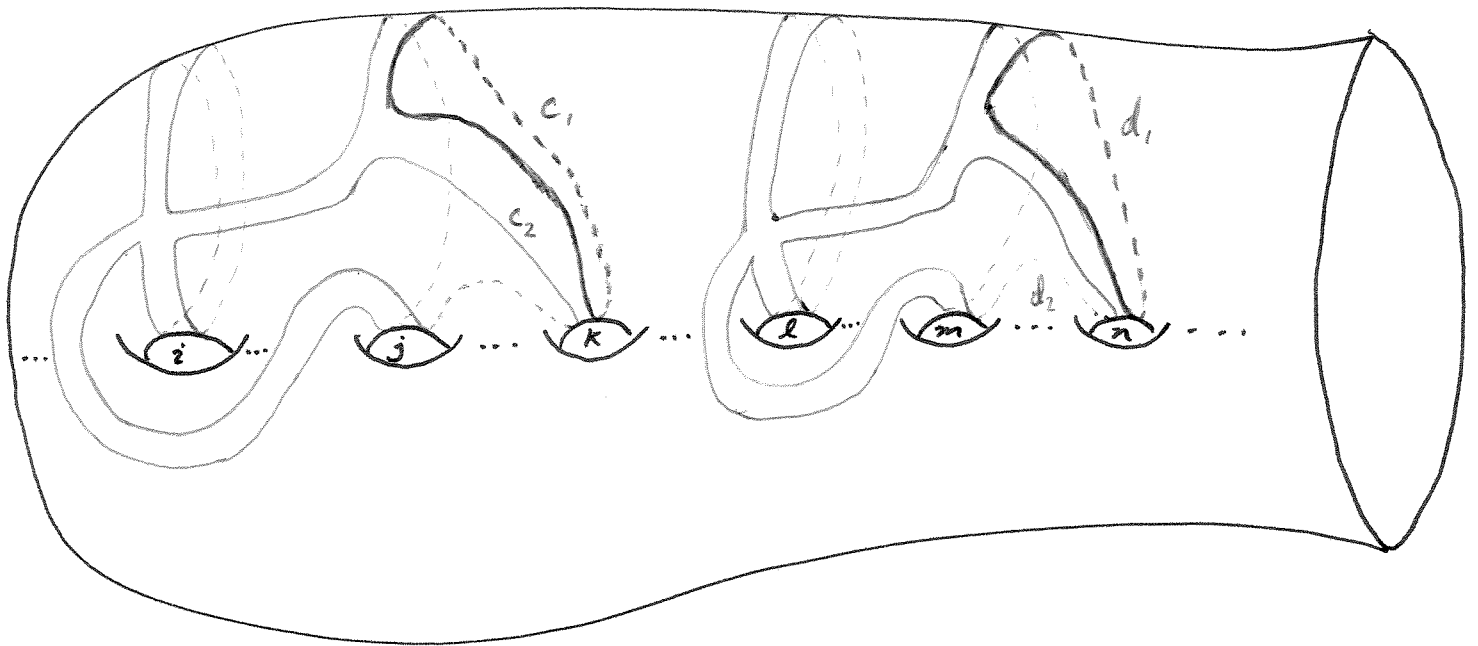


The rank of W is a polynomial in g of degree ≥ 6 .



c_1, c_2 homologous to a_k

d_1, d_2 homologous to a_n

$$\sigma_* (\{ T_{c_1}, T_{c_2}^{-1}, T_{d_1}, T_{d_2}^{-1} \})$$

$$= \sigma (T_{c_1}, T_{c_2}^{-1}) \wedge \sigma (T_{d_1}, T_{d_2}^{-1})$$

$$= (\bar{a}_i)(\bar{b}_i + \bar{a}_j)(\bar{a}_k + 1) \wedge (\bar{a}_l)(\bar{b}_l + \bar{a}_m)(\bar{a}_n + 1)$$

$$= \bar{a}_i \bar{a}_j \bar{a}_k \wedge \bar{a}_l \bar{a}_m \bar{a}_n + \text{other stuff}.$$

This shows that we can hit $\binom{g}{6}$ linearly independent items in $\Lambda^2 B_3$.