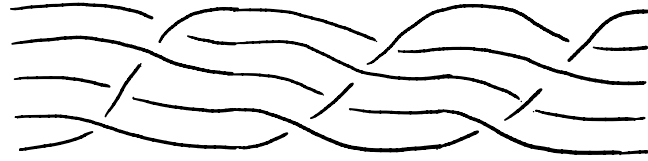


Practice Problems

1.) Show that the closure $L_{5,3}$ of the alternating 5-braid

$$(\sigma_1 \sigma_2^{-1} \sigma_3 \sigma_4^{-1})^3 =$$

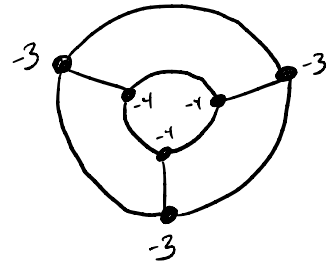


(this is the
Knot 12a1019)

is slice.

(Give up? Try Ctrl+b or Cmd+b in KLO)

2.) Show that $\Sigma_2(S^3, L_{5,3})$ is the boundary of a definite 4-manifold whose intersection form is represented by the incidence matrix Q of the graph



Write down the matrix.

3.) Is there a lattice embedding $\varphi: (\mathbb{Z}^6, Q) \rightarrow (\mathbb{Z}^6, -I)$?
If so, what is it? Is it ubiquitous?