

Problem 1.

Let T be the torus $S^1 \times S^1$ and let T' be T with a small open disk removed. Let X be obtained from T by attaching two copies of T' , identifying their boundary circles with the longitude and meridian circles $S^1 \times \{x_0\}$ and $\{x_0\} \times S^1$ in T . Find a presentation for $\pi_1(X)$.

Solution.

this is a solution

Problem 2.

My problem

Solution.**Exercise (S+S 1.3).**

yolo