Exercise Sheet 7

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Question 1:

Use the CW structure to compute the homology of $T^2 = S^1 \times S^1$.

Question 2:

Use the CW structure to compute the homology of K, the Klein Bottle.

Question 3:

Use the CW structure to compute the homology of \mathbb{RP}^2 , the real projective plane. Bonus: Compute the homology of \mathbb{RP}^n .

Question 4:

Use the CW structure to compute the homology of $T^3 = S^1 \times S^1 \times S^1$.