Algebraic Invariants in Knot Theory
Practicals 12

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Exercise 1. Prove that the knots $\mathbf{3_1}$ and $\mathbf{5_1}$ are torus knots.

Exercise 2. Find suitable definitions and diagrams for the torus links $K(\pm 1, 0)$ and $K(0,0)$.

Exercise 3. Construct a torus link not of the form $K(q,r)$ for every $q, r \in \mathbb{Z}$.

Exercise 4 (7.1.3, 7.1.4 rev). Determine and draw an oriented regular diagram for the torus link $K(q,r)$ in the following cases:

   (i) $q > 0$ and $r > 0$.

  (ii) $q > 0$ and $r < 0$.

 (iii) $q < 0$ and $r > 0$.

 (iv) $q < 0$ and $r < 0$.