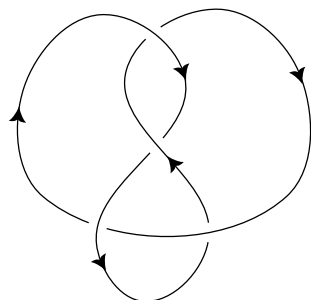


# Conway polynomial

**Exercise 1:** Calculate the Conway polynomial of the following knot.



**Exercise 2:** Calculate the Conway polynomial of the following knot  $K$ . To make it more manageable, use that it has unknotting number of one and the circled intersection is the witness of it. Additionally the following diagrams might be useful. And you can use that  $\Delta_E(z) = 0$  and  $\Delta_T(z) = z^2 + 1$  and that for any knots  $K_1$  and  $K_2$  it holds that  $\Delta_{K_1 \# K_2}(z) = \Delta_{K_1}(z) \cdot \Delta_{K_2}(z)$ . Of course if you have time, prove these helping statements.

