1. (5 points) Compute the Alexander polynomial of the figure-eight knot.

2. (3 points) The **unknotting number** of a knot \( K \) is the minimal number of crossing changes required to convert \( K \) into the unknot. Compute the unknotting number of the trefoil. You might find the following website helpful:

   \[ \text{http://www.popmath.org.uk/exhib/pagesexhib/unknum.html} \]

3. (2 points) J. W. Alexander, the mathematician who discovered the Alexander polynomial, made many other contributions to mathematics. Briefly describe some of them.