Invariants!

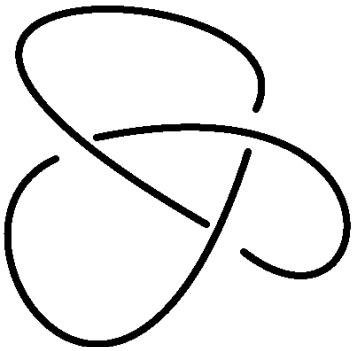
While working in a group make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.

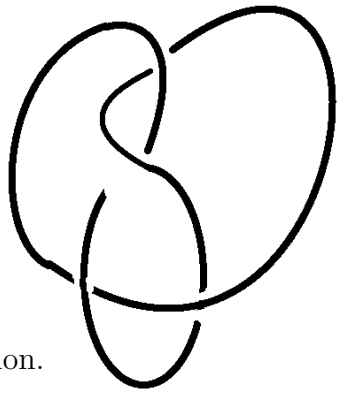
Definition Tricolorable. *A projections of a knot or link is said to be* tricolorable *if there is a way to color the arcs with one of three colors such that:*

- *More than one color is used.*
- *At each crossing, either,* only one *color is used or* all three *colors are used.*

1. Determine if the projection of the trefoil knot is tricolorable.



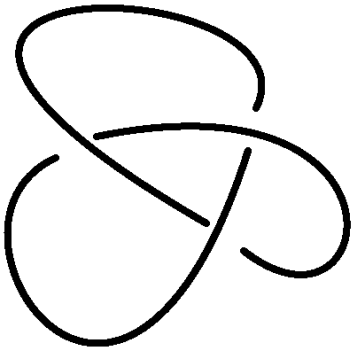
2. Determine if the projection of the figure eight knot is tricolorable.



3. Verify that RI does not change the tricolorability of a projection.

Definition Invertible. *If an oriented knot K can be deformed so that it has an identical projection but with its orientation reversed, then we say the knot is* invertible. *If no such deformation exists, then we say the knot is* non-invertible.

4. Determine if the trefoil knot is invertible.



5. Determine if 8_{17} is invertible.