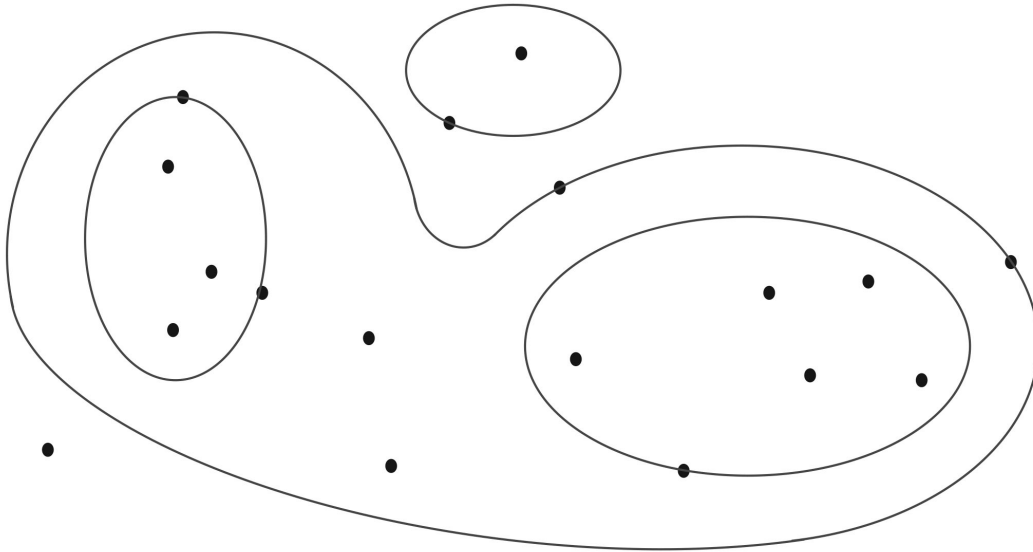
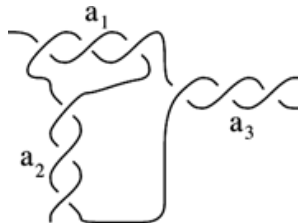


Problem set 4, assigned on 10/13/19

1. Can you find a winning strategy for the first player in this game of rims:



We discussed in class how rational tangles correspond to continued fractions; for example



corresponds to

$$a_3 + \frac{1}{a_2 + \frac{1}{a_1}}$$

2. Draw the rational tangle corresponding to the continued fraction

$$-4 + \frac{1}{1 + \frac{1}{2 + \frac{1}{5}}}$$

3. Using the operations S (swap) and R (rotate) discussed in class, can you untangle the rational tangle corresponding to the number 3?