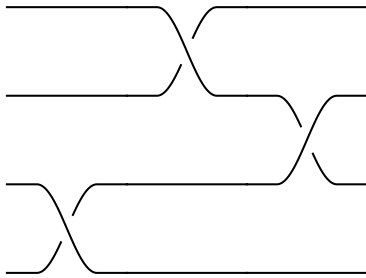


Worksheet 118 April 26th, 2013

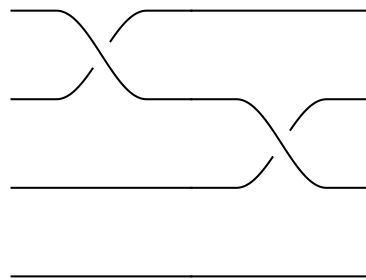
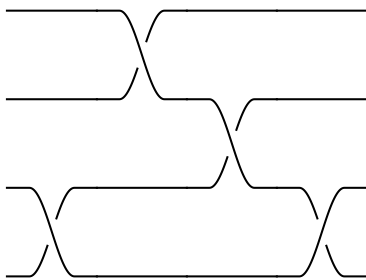
Braids of four strands - refer to the extra sheet for generators.

1. Recall that the inverse of a braid is its mirror image. Can you draw the inverse of the braid below?



2. Write the braid above in mathematical notation (in terms of the generators σ_i and the inverses).

3. Are the braids drawn below equivalent? What if you close them up into knots?



4. This question is about an important property of knots, called tricolorability. For a knot to be tricolorable, it must be possible to color each strand one of three colors, and at each crossing either all of the colors are the same or they are all different. For example, the Trefoil Knot shown below is tricolorable. See if you can tricolor the other two (it might not be possible).

