

1. Draw an oriented knot diagram for the sum of
 - (a) two copies of the right trefoil knot;
 - (b) a right and a left trefoil knot;
 - (c) a right trefoil and a figure eight knot.

2. Suppose K_1 and K_2 are colorable knots. Show that the sum $K_1 + K_2$ is also colorable. Explain why this is true even if just K_1 is colorable. Illustrate this by coloring your diagram from part 1(c).

3. Each link in the first row is equivalent to a link in the second row (the ones in the first row, from left to right, are the Hopf link, King Solomon's knot, and the Whitehead link). Match the equivalent pairs and show by simple drawings how you deform one to another.

