

An extra relation?

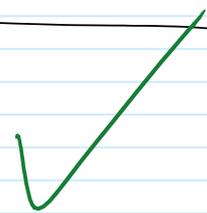
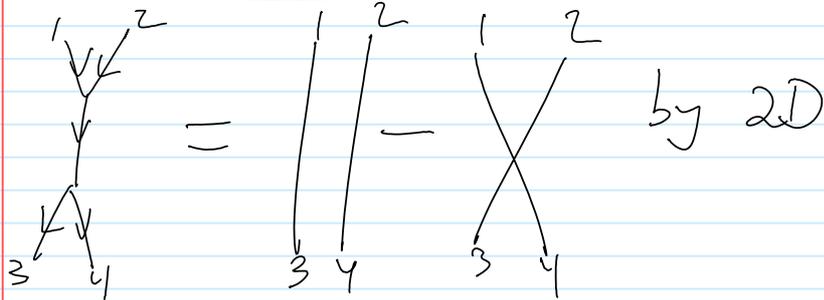
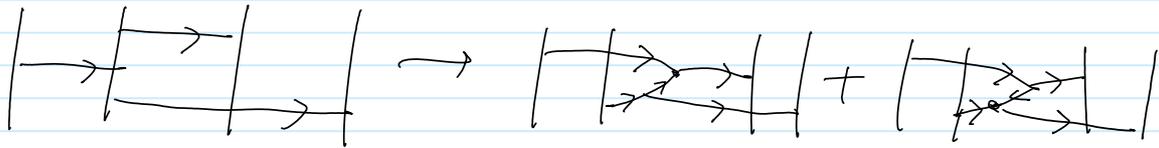
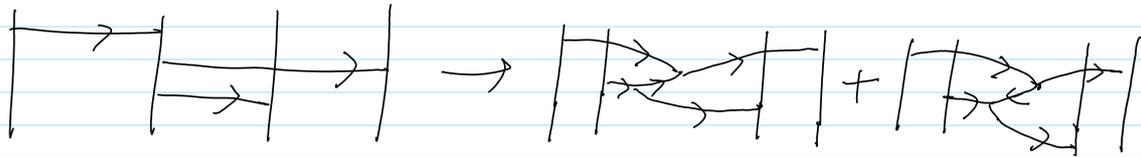
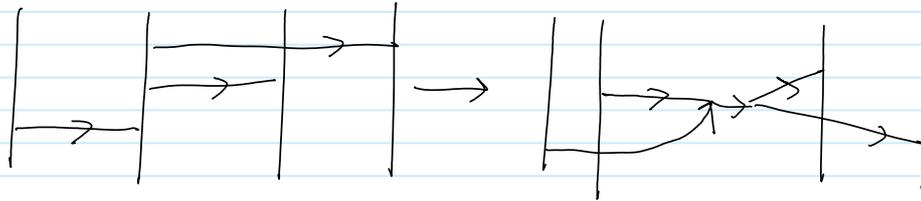
June-24-15 8:32 AM

$$Jac = S[B[x_1, B[x_2, x_3]] + B[x_2, B[x_3, x_1]] + B[x_3, B[x_1, x_2]]];$$

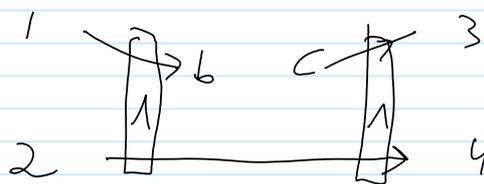
$$In[92]:= \text{Jacobi} @@ \{a[1, 1, 2], a[1, 2, 3], a[1, 2, 4]\}$$

$$Out[92]:= \{a[1, 12], a[1, 23], a[1, 24]\} \rightarrow \gamma[-b_1, 234] + \gamma[b_2, 134] + \gamma a[-1, 1324] + \gamma a[-1, 2413] + \gamma a[1, 1423] + \gamma a[1, 2314]$$

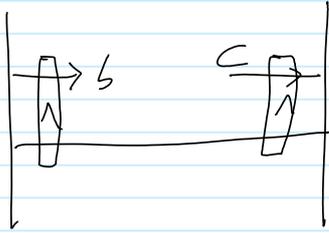
Can it be split in two?



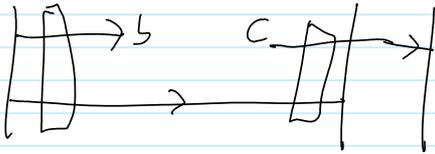
So the extra relation is the usual $A^2(2D) = ID$ relation!



gives no new relations because b_1 commutes with a_2 .



explained by co-degree reasons.



b commutes w/ a after a co-degree shift.

