0.1 Commutation of Lie groups

We can measure commutation of Lie groups using:

$ABA^{-1}B^{-1}$

If the group commutes then:

$ABA^{-1}B^{-1} = BA^{-1}B^{-1} = I$

0.1.1 Commutation of Lie algebra: COMPLETE THIS

This corresponds to $[A, B] = AB - BA$ in the underlying lie algebra, if we expand.

$A = e^{ta}$

$B = e^{tb}$

$ABA^{-1}B^{-1} = e$