

## ASSIGNMENT 10 (LIE ALGEBRAS)

COLTON GRAINGER (MATH 6230)

Spent most of my day futzing around on my laptop.

**8-22: A general Lie algebra.**

**8-19:  $(\mathbb{R}^3, \times)$  with the cross-product.**

**8-20: An isomorphism with  $(\mathbb{R}^3, \times)$  with the cross product.**

**8-30:  $\mathfrak{su}(2)$  and  $\mathfrak{o}(3)$  are isomorphic  $\mathbb{R}^3$  with the cross product.**

REFERENCES