The course notes (so far) are on our class web page http://users.math.msu.edu/users/jhall/classes/MTH914_F15/MTH914_F15.html

From the course notes

"Introduction to Lie algebras, version of 13 October 2015" (that is, **ILA**), do the following problems:

ILA PROBLEMS (2.5)-(2.10) ILA PROBLEMS (3.18),(3.19)

Please note that there are other problems at the end of Chapter 1, which you might consider. Also there are numerous Exercises, which you might also examine. (Most of the exercises are shorter calculations.)