The course notes (so far) are on our class web page

`http://users.math.msu.edu/users/jhall/classes/MTH914_F17/MTH914_F17.html`

From the course notes

   "Introduction to Lie algebras, version of 13 September 2017"

(that is, **ILA**), do the following problems:

   ILA Problems (1.7)-(1.8)

   ILA Problems (2.5)-(2.10)

   Also there are numerous Exercises, which you might also examine. (Most of the exercises are shorter calculations.)