Lie Algebras University of Kaiserslautern, SS 2020 Prof. Dr. Ulrich Thiel M. Sc. Dario Mathiä

Exercise Sheet 02 Apr 27, 2020

11p1 21, 20

Exercise 1. Hum, Exercise 2.10

[For this exercise, you will need the adjoint representations of x and y which were subject of last week's Exercise 2. They are

$$\begin{pmatrix} 0 & -2 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 0 \end{pmatrix} \text{ and } \begin{pmatrix} 0 & 0 & 0 \\ -1 & 0 & 0 \\ 0 & 2 & 0 \end{pmatrix},$$

respectively.]

Exercise 2. Hum, Exercise 3.3

Exercise 3. Hum, Exercise 4.3

Exercise 4. Hum, Exercise 4.4

Due by May 3, 2020