

MATH 6250: Assignment 4

Exercises from the book: 4.8, 4.10, 4.11, 4.13

Problems from the text:

1. Page 50, line -4. Show that “this is ‘easily’ seen to be the largest ideal of R contained in \mathfrak{A} .”
2. Page 53, line 2. Show that this ring R is “nil, but ‘easily’ shown not to be nilpotent.”
3. Page 54, line 14. Show that “it is ‘easy’ to see that $\text{rad}(R) = 0$.”
4. Page 57, line -9. Show, as an ‘easy’ exercise, that $J^i V = V_{n-i}$, and that ${}_R V$ is uniserial.