Math 204B (Number Theory), UCSD, winter 2025 Problem Set 5

- 1. Prove that for any local field K of characteristic 0 and any positive integer n, the group $K^*/(K^*)^n$ is finite.
- 2. CFT notes 4.1, exercise 1.
- 3. CFT notes 4.1, exercise 6.
- $4. \ \mathrm{CFT} \ \mathrm{notes} \ 4.2, \ \mathrm{exercise} \ 3.$
- 5. CFT notes 4.3, exercise 3.