Übungsblatt 8

Abgabe am Montag, 10.02.2020 bis 23:59 Uhr

Aufgabe 1.1. Let $K = \overline{\mathbb{F}_p}(t)$. Show that there is an integer $d \ge 1$ such that the set of finite (separable) unramified extensions L/K of degree d is infinite.

Aufgabe 1.2. Use SAGE to find all number fields of degree at most 4 which are only ramified over 2, and compute their class numbers. (Can you find all number fields with degree at most 10 which are only ramified over 2?)