

Galois Theory: GAL HW

Due on Apr 29, 2022 at 11:59pm

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HW extra
Exercise 15.1.1

Problem 1

Exercise 15.1.1 Show that for a prime p and a positive integer n we have

$$\Phi_{p^n}(x) = 1 + x^{p^{n-1}} + x^{2p^{n-1}} + \dots + x^{(p-1)p^{n-1}} \quad (1)$$

Soln: