Algebra III/Introduction to Algebra III: Scheme Theory

Due: Please upload solutions to NUCT by Tuesday, July 5, 2022.

Problem 1. Let A be a ring, and let $p \in A[x]$ be a monic polynomial. Show that

$$Y \simeq \operatorname{Spec}(A[x]/(p)) \xrightarrow{f} X \simeq \operatorname{Spec}(A)$$

is proper.