PROBLEM SET 7 (DUE ON THURSDAY, OCT 27)

(All Exercises are references to the August 29, 2022 version of *Foundations of Algebraic Geometry* by R. Vakil.)

Problem 1. Exercise 5.3.C (integrality conditions for Noetherian schemes)

Problem 2. Exercise 8.3.E (an application of the affine-locality of affine morphisms)

Problem 3. Exercise 8.3.J (finite morphisms have finite fibers - you can assume Exercise 8.3.G in the proof, though you may want to think about the algebra in that exercise as well)