

**Exercises**  
**Commutative Algebra & Algebraic Geometry**  
for April 25, 2017

- (7) Give an example of a non-Noetherian ring.
- (8) Prove Lemma 3.1.3.
- (9) Consider Lemma 3.1.3 for a NON algebraically closed field.

How do we have to change the statements?