

18.726 ALGEBRAIC GEOMETRY. HOMEWORK SET 9

This problem set is due Tuesday April 24, 2007 at the beginning of class. Read sections III.4, III.5, III.6 and III.7 in Hartshorne. You should read all the exercises and work through as many of them as you can. If you have not taken the qualifying exam and need a grade, you must turn in the following problems: In problems III.4.5 and III.4.6, you may assume that X is noetherian and separated.

- (1) page 222 Problem III.4.1,
- (2) page 223 Problem III.4.3,
- (3) page 224 Problem III.4.5
- (4) page 224 Problem III.4.6,
- (5) page 230 Problem III.5.1,
- (6) page 230 Problem III.5.2,
- (7) page 230 Problem III.5.3,
- (8) page 231 Problem III.5.5,
- (9) page 231 Problem III.5.6,