Algebraic Geometry 21/2 supplimentary worksheet 10

Weil Divisors

In lecture, we discussed Weil divisors, but didn't cover various things. To suppliment our coverage, it would be great to try and work through the proofs of

- Proposition 6.2
- Proposition 6.4

This would be particularly useful to see if there are any issues we should discuss related to commutative algebra, and whether or not we might recommend other references for various facts. An excellent general reference for many such things would probably be Eisenbud's text "Commutative Algebra with a View Toward Algebraic Geometry."

Another useful thing to do would be

• look over the definition of the sheaf of total quotient rings on page 141

The following is a problem which is not directly connected to what we have discussed so far, but is of independent interest

• Hartshorne problem II.6.10 (page 148)