

MATH 495 Wednesday 15 March

Review of Cartier divisors and line bundles; Riemann–Roch Theorem

To be discussed Friday 17 March / turned in Monday 27 March

- (1) Let $f : X \rightarrow Y$ be a finite morphism of non-singular curves. We defined a homomorphism $f^* : \text{Div}(Y) \rightarrow \text{Div}(X)$. Show that f^* preserves linear equivalence, and hence induces a homomorphism of the divisor class groups.
- (2) Chapter I, exercise 7.2 (a) and (b).
- (3) Chapter IV, exercise 1.1.
- (4) Chapter IV, exercise 1.2.