

Math 428/518 : Compact Riemann Surfaces

Problem Set 5

1. Prove that the coordinate-free description we gave in class of the map to projective space associated to a basepoint-free linear subsystem of the complete linear system associated to a line bundle is the same as the concrete description given for the one associated to $L(D)$ for D the divisor associated to the line bundle. Part of this problem includes precisely formulating the meaning of “the same”.
2. Section V.3, problems H, I
3. Section V.4, problems J, K