Math 256B. Homework 11

Due Wednesday 17 April

1. Hartshorne III Ex. 6.5.

2(NC). Hartshorne III Ex. 6.7.

3. Prove part (c) of Theorem 7.1 without using the theory of δ-functors. Instead, use short and long exact sequences and induction on i, as was done in class in other proofs. Do not worry about showing that the isomorphisms are natural and functorial.

   However, don't use any non-canonical isomorphisms (e.g., an isomorphism of a finite-dimensional vector space with its dual).