

1. (Do not hand in) Weibel, Exercises 2.1.2, 2.2.3, 2.3.2, 2.3.3
2. Weibel, Exercise 2.3.5
3. Let  $R = \mathbb{C}[t]/(t^2)$ . Show  $R$  is an injective module.
4. Weibel, Exercise 2.5.2
5. Let  $R = \mathbb{C}[t]/(t^2)$  and  $M = R/(t)$ . Show  $\text{Ext}^i(M, M) \cong \mathbb{C}$  for all  $i \geq 0$ .