HOMEWORK #9 – MATH 536
SPRING

DUE MONDAY, APRIL 14TH

(1) Section 12.1 #5, 7, 15
(2) Let $R = \mathbb{F}_2[t]$ and M be an R-module generated by elements a, b, c subject to the relations:

$$a + tb + (t^2 + t + 1)c = 0, (t + 1)b + (t^2 + t)c = 0.$$

Write M as a direct sum of cyclic modules.
(3) Section 12.2 #10
(4) Section 13.1 #3, 8
(5) Section 13.2 #12, 13, 19