Only hand in the starred questions.

Chapter 7, page 69: 2*, 3, 5*
Chapter 8, page 75: 2*, 3, 4*, 5*, 7.

Extra question: Let \( U = S_1 \oplus \cdots \oplus S_r \) be an \( FG \)-module which is the direct sum of finitely many simple \( FG \)-modules \( S_1, \ldots, S_r \). Show that if \( T \) is any simple submodule of \( U \) then \( T \cong S_i \) for some \( i \).

**Exam** On Friday October 20 we are due to have an exam (our second...!!!).