1 Imagine we have a theory involving one real scalar field and one dirac-fermionic field. Follow the steps in the lecture and obtain the LSZ formula (eq. 19.1 in the lecture notes) for an arbitrary number of scalars and fermions (in initial and final states).

(again, no need to redo everything, focus on the changes introduced by the fact we have fermions and two different fields)

2 Read section 6.1 (including 6.1.1 and 6.1.2) of Schwartz, where he derives the LSZ formula in position space. Be attentive for where the same assumptions we did in momentum space are entering. (Just reading here, not need to hand in exercise 2)