1. Problem 4.3, in chapter 4, Lundstrom, p. 206 in 2nd edition. Hint: Start from Eq. (4.7) for $f_A$ with (4.32) for the non-degenerate case. Form the ratio of $f_A$ to $f_S$ in terms of the drift and thermal velocities by using an approximate equipartition for the average thermal velocity, and an approximate mobility in terms of $\tau_f$. Discuss this ratio for low and high fields.

2. Problem 4.4, in chapter 4, Lundstrom, p. 206 in 2nd edition. Hint: Consider Eq. (1.46a) and the equation that follows Eq. (3.18).


Homework assignments will appear on the web at:
http://www.ece.udel.edu/~kolodzey/courses/eleg667f06.html
Note: On each homework and report submission, please give your name, the due date, assignment number and the course number. For full credit - include units/dimensions for all numerical quantities