PHYC 523: Quantum Field Theory I
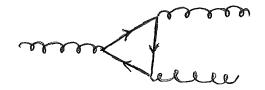
Fall 2016

Homework Assignment #4

(Due December 12, 2016)

1- Show by direct claculaiton that the following one-loop diagrams in QED vanish:

2- Show that the apparently logarithmically divergent box diagram for light by light scattering in QED, shown below, is in fact convergent.