Pre-Lab Exercise 2:

1. Saturation is VDS>=VGS-Vth. VD = 10.766, VG = 4.9V, VS = 2.973V, Vth = 1.73V. So VDS = 7.793V, VGS = 1.927V, and Vth = 1.73V, making the inequality equal to 7.793V >= 1.927-1.73. The FET is definitely in saturation.

2. AVoc = Vout/Vin. At its peak Vout is 3.06V and at its peak Vin is 0.2V, making AVoc = 15.3. Rin = Vin/Iin. At its peak Vin is 0.2V and at its peak Iin is 734.4 nA. This makes Rin 272k ohms roughly.