1. California is evaluating a new program to rehabilitate prisoners before their release; the object is to reduce the recidivism rate - the percentage who will be back in prison within two years of release. The program involves several months of “boot camp” - military-style basic training with very strict discipline. Admission to the program is voluntary. According to a prison spokesman, “Those who complete boot camp are less likely to return to prison than other inmates.”

a. (2 points) What is the treatment group in the prison spokesman’s comparison? What is the control group?

The treatment group is made up of the prisoners who choose to complete the boot camp. The control group consists of those who don’t participate in the boot camp.

b. (1 point) Is the prison spokesman’s comparison based on an observational study or a randomized controlled experiment?

The prison spokesman’s comparison is based on an observational study. (The experiment’s conductors didn’t randomly designate who would go to the boot camp and who wouldn’t.)

c. (2 points) True or false (and explain in 2 sentences or less): the data show that boot camp worked.

False: We can’t say that the data show that boot camp worked. Since the boot camp participants were volunteers, it’s hard to know whether the fact that they had a lower recidivism rate is due to the boot camp or due to some other factor. For instance, it may be that those who chose the boot camp option were simply those who were most committed to turning their lives around so that they’d never have to go back to prison.