

Practice, PMS-73, #1-4, pg. 1

- ① a) - It is an experiment because the principal imposed a treatment - group work.
- Population: Geometry students
 - Sample: Students in the 5 classes who did group work, and students in the 5 classes who worked individually.
 - Characteristic of interest: the effectiveness of group work on geometry students' grades.

- b) - It is a sample survey because students were asked to respond to a question.
- Population: students at my school
 - Sample: the 120 students who participated in the survey.
 - Characteristic of interest: student interest in your school about doing volunteer work

- c) - It is an observational study because the researcher gathered existing data from its natural setting.
- Population: professional athletes
 - Sample: professional athletes from the 6 sports organizations.
 - Characteristic of interest: link between knee injuries & female professional athletes.

Practice, pg. 115-73, pg. 2

- ②
- students in your school
 - Possible answer - number the students then use a random # generator to select the sample.
 - the amount of time students exercise during an average week
 - How many hours of exercise do you get in a typical week?
- ③
- adults who experience migraine headaches.
 - the 150 adults who experience migraines
 - Possible answer: Make sure the adults in the sample do not experience migraines from other known causes.
- ④
- The 10 fish are chosen from the group of smallest sized fish.
 - The water was only collected from the edge of the lake. It may contain different bacteria levels than the water from the middle of the lake.
 - The first 25 runners are likely the most fit.
 - Bus drivers will likely favor government spending on public transit.