

*Please work with your group on these exercises*

1. A survey of 120 university students was designed to compare participation in community service for men and women.

Gender	Participates	Does not Participate
Male	20	45
Female	25	30

- (a) What proportion of males participate in community service? What proportion of females do?
- (b) Of those who participated in community service, what proportion are females?
- (c) Use the  $\chi^2$  statistic to determine whether or not this sample provides evidence that participation in community service is associated with gender.

2. A survey of students was designed to test whether or not there is an association between choice of major and levels of altruism. Participants filled out a questionnaire from which the researchers were able to classify the level of altruism as Low, Medium or High. Here are the data:

Field of Study	Low	Medium	High
Engineering	12	129	94
Liberal Arts & Education	7	77	129
Management	3	44	28
Sciences	7	29	24