

4. The table below shows the number of teenagers who had had a summer job the previous summer.

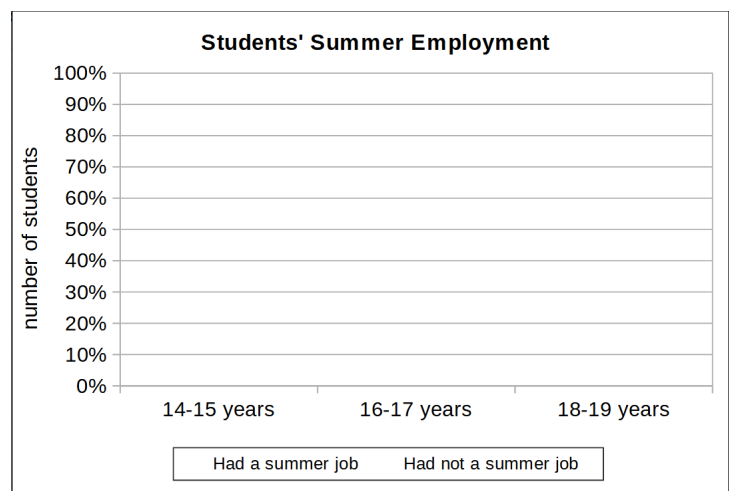
a. Ryan says there is no association because the numbers 33 and 35 are very close, and also the numbers 55 and 53. To answer him, first calculate the relative frequencies based on the row totals.

	Had a summer job		Total
	Yes	No	
14-15 years	33	109	
16-17 years	35	55	
18-19 years	68	53	
TOTALS			

Relative frequencies:

	Had a summer job		Total
	Yes	No	
14-15 years			
16-17 years			
18-19 years			

b. Then make a stacked bar graph of the data. Use two different colors or two different patterns to color the bars, and fill in the legend.



c. Based on the data and the graph, what would you say to Ryan? Be convincing — support your answer!

d. Which statements below are true? Choose all that are true.

- (i) Approximately the same number of people were surveyed from each of the three age groups.
- (ii) About $\frac{2}{3}$ of all the surveyed teenagers had had a summer job.
- (iii) About $\frac{3}{4}$ of the youngest age group had not had a summer job.
- (iv) About $\frac{2}{5}$ of all the surveyed teens had had a summer job.