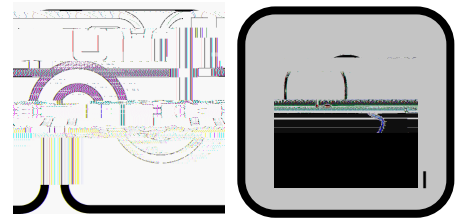


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**Activity**  
**Contingency Tables (Conditional Probability)**

In a survey of readers of a teen magazine a question was asked, "Which do you prefer: Instagram or Snapchat?" There were 362 responses from females and 216 responses from males. 281 females and 98 males stated they prefer Instagram.



- a) Complete the two-way table to organize the responses to the survey. Determine the totals of the rows and columns.

	Instagram (I)	Snapchat (S)
Male (M)		
Female (F)		

- b) What is the probability that a randomly selected reader is female and prefers Snapchat?
- c) Of the respondents who prefer Snapchat, what is the probability that the respondent is female?
- d) Given that a female reader is selected, what is the probability that she prefers Snapchat?
- e) Given that a male reader is selected, what is the probability that he prefers Snapchat?