

Chapter 1 FRAPPY!

Student Samples Commentary

Sample #1

In part (a), the response provides the correct percentage, but does not include any supporting work. Part (a) was scored partially correct (P). In part (b), the response includes an accurate segmented bar chart that uses relative frequencies. However, because the labeling is incomplete, part (b) was scored partially correct (P). In part (c), the response correctly states that there is no association because the conditional distributions are “relatively the same.” Part (c) was scored essentially correct (E). In part (d), the response correctly answered that the relationship between marital status and housing status was stronger by describing the association with numerical evidence (81% and 60%) and comparing the two associations (“a difference of nearly 20%” when conditioning by marital status versus “nearly identical” when conditioning by gender). Part (d) was scored essentially correct (E). With two parts essentially correct and two parts partially correct, the entire answer was judged as substantial and earned a score of 3.

Sample #2

In part (a), the response provides the correct percentage and includes supporting work. Part (a) was scored essentially correct (E). In part (b), the response includes an appropriate type of graph with good labels, but uses frequencies (counts) rather than relative frequencies (percents), making it harder to compare the conditional distributions. Part (b) was scored partially correct (P). In part (c), the response correctly states that there is no association because the distribution for males is similar to the distribution for females (both are more likely to own). However, even if both genders are more likely to own than rent, it is still possible that there is an association (e.g., if 70% of males own and 90% of females own). Because the response didn’t specifically compare the percentage of males and percentage of females that own their home, part (c) was scored partially correct (P). In part (d), the response correctly answered that the relationship between marital status and housing status was stronger. However, there is no justification of the association between marital status and housing status and no comparison of the two associations using graphical or numerical evidence. Part (d) was scored incorrect (I). With one part essentially correct, two parts partially correct, and one part incorrect, the entire answer was judged as developing and earned a score of 2.