

Stat 185 - In class problems

Monday, August 28

1. Figure 1 shows the long jump lengths in feet of 5 high school long jumpers. The numbers at the base of the bar plot and surrounding the pie chart are the numbers of the contestants.
 - (a) Which contestant won?
 - (b) Which figure did you use to answer that question?
 - (c) What type of data is the list of contestant numbers?

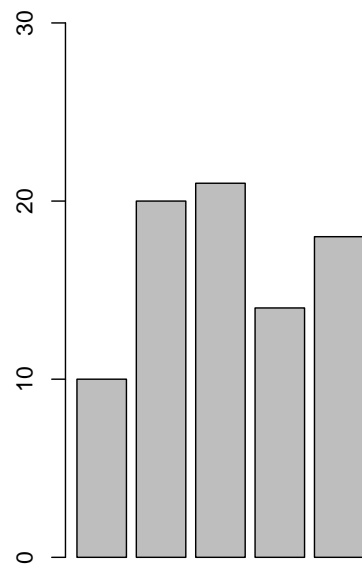
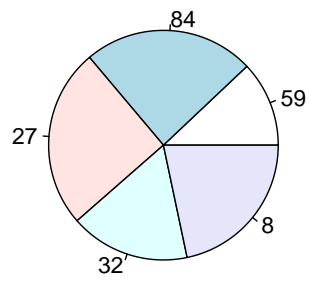
2. The table below shows the total number of days that several people went bike riding last year.
 - (a) Convert the table to a relative frequency table.
 - (b) Sketch a rough bar plot of the data

| | | | |
|------|-------|------|----------|
| Mark | Jacob | Dave | Adrienne |
| 301 | 365 | 221 | 56 |

3. 910 randomly sampled registered voters from Tampa, FL were asked if they thought workers who have illegally entered the US should be (i) allowed to keep their jobs and apply for US citizenship, (ii) allowed to keep their jobs as temporary guest workers but not allowed to apply for US citizenship, or (iii) lose their jobs and have to leave the country. The results of the survey by political ideology are shown below.

| | | <i>Political ideology</i> | | | Total |
|-----------------|---------------------------|---------------------------|----------|---------|-------|
| | | Conservative | Moderate | Liberal | |
| <i>Response</i> | (i) Apply for citizenship | 57 | 120 | 101 | 278 |
| | (ii) Guest worker | 121 | 113 | 28 | 262 |
| | (iii) Leave the country | 179 | 126 | 45 | 350 |
| | (iv) Not sure | 15 | 4 | 1 | 20 |
| | Total | 372 | 363 | 175 | 910 |

- (a) What percent of these Tampa, FL voters identify themselves as conservatives?
- (b) What percent of these Tampa, FL voters are in favor of the citizenship option?
- (c) What percent of these Tampa, FL voters identify themselves as conservatives and are in favor of the citizenship option?
- (d) What percent of these Tampa, FL voters who identify themselves as conservatives are also in favor of the citizenship option? What percent of moderates share this view? What percent of liberals share this view?



59 84 27 32 8

Figure 1: A pie chart and a bar plot