

2.2—part 2 Assignment: p.51-53 #2, 3, 6, 13, 14, 18, 22, 30

2. After construction of a relative frequency distribution summarizing the times that males spend each day thinking about females, what should be the sum of the relative frequencies?

3. In a Harris Interactive survey, 2303 adults were asked whether they believe in five different things, and the accompanying table summarizes the results. Does this table describe a relative frequency distribution? Why or why not?

Believe in the devil	60%
Believe in hell	61%
Believe in UFOs	32%
Believe in astrology	26%
Believe in reincarnation	20%

6. Use the following frequency distribution to identify the class width, class midpoints, and class boundaries.

<u>Age (years) of Best Actor When Oscar Was Won</u>	<u>Frequency</u>
20-29	1
30-39	26
40-49	35
50-59	13
60-69	6
70-79	1

13. Complete the following frequency distribution so that there are 40 sample values that make up a normal distribution.

<u>White Blood Cell Count of Females</u>	<u>Frequency</u>
3.0-4.9	4
5.0-6.9	7
7.0-8.9	
9.0-10.9	
11.0-12.9	

14. Complete the following frequency distribution so that there are 40 sample values that make up a normal distribution.

<u>White Blood Cell Count of Females</u>	<u>Frequency</u>
3.0-4.9	2
5.0-6.9	6
7.0-8.9	
9.0-10.9	
11.0-12.9	
13.0-14.9	

18. Construct the cumulative frequency distribution that corresponds to the following frequency distribution.

<u>Age (years) of Best Actor When Oscar Was Won</u>	<u>Frequency</u>
20-29	1
30-39	26
40-49	35
50-59	13
60-69	6
70-79	1

<u>Age (years) of Best Actor When Oscar Was Won</u>	<u>Cumulative Frequency</u>

22. Use the following female pulse rates (beats per minute) from Data Set 1 in Appendix B: Body Measurements from the National Center for Health Statistics. Begin with a lower class limit of 50 and use a class width of 10. Compare this frequency distribution to the one found in question 21 from yesterday's homework. Is there a notable difference between pulse rates of males and females?

Female Pulse Rates (beats per minute):

78, 80, 68, 56, 76, 78, 78, 90, 96, 60, 98, 66, 100, 76, 64, 82, 62, 72, 78, 74, 90, 90, 68, 72, 82, 72, 78, 104, 62, 72, 72, 88, 74, 72, 82, 78, 78, 98, 72, 64

30. An analysis of 50 train derailment incidents identified the main causes listed below, where T denotes bad track, E denotes faulty equipment, H denotes human error, and O denotes other causes (based on data from the Federal Railroad Administration):

T T T E E H H H H H O O H H H E E T T T E T H O T

T T T T T T H T T H E E T T E E T T T H T T O O O

Use the given categorical data to construct a relative frequency distribution.