

HW Answers Section 1.1

REMEMBER: ODD ANSWERS IN BACK OF BOOK!!

p. 46 - 48

2. Data gives % of people aged 18 - 24 yrs old who own MP3.

You want to know what % of MP3 owners are 18 - 24 yrs old.

NOT THE SAME THING!!

6. a)

0	399
1	134567889
2	000123455668888
3	25699
4	1345579
5	0358
6	1
7	0
8	366
9	3

$$3 \mid 5 = \$35$$

0	3
0	99
1	134
1	567889
2	0001234
2	55668888
3	2
3	5699
4	134
4	5579
5	03
5	59
6	1
6	
7	0
7	
8	3
8	66
9	3
9	

$$4 \mid 3 = \$45$$

You can also place * as the second stem.

b) The split stem and leaf shows spread, gaps, and outliers.

c) This distribution of the amount of money spent by shoppers at this supermarket is **skewed right** indicating a higher frequency of shoppers spent less money. There are gaps from \$62 to \$69 and \$71 to \$82. **Possible** outliers at \$83, \$86, and \$93.

8) a) The distribution of the number of days is skewed to the right indicating that over this 65 year period, there were fewer frost days in April. Since the distribution is skewed right, the best measure of center is the median. This value is located around 3*. The spread of frost days was from 0 to 10. There are no gaps or outliers.

b) The temperature fell below freezing in April for about 15 out of 65 years or 23%.

* Bin 1 accounts for 15 of the years, bin 2 accounts for about 11 of the years, bin 3 accounts for 5 of the years. This is 31 of the 65 years. Bin 4 (3 days of frost) accounts for 11 years which takes us to and beyond half of 65 years. $15 + 11 + 5 + 11 = 42$ only needed to get to 32.5

10) The distribution of lengths of words in Shakespeare's plays is skewed to the right indicating a high frequency of words in Shakespeare's plays have few letters. Since the distribution is skewed right, the best measure of center is the median located between between 5 and 6 letters. [See explanation above for determining the median from a histogram.] The spread of letters is from 1 letter to 12 letters, so the range is 11 letters.