

Stem-and-Leaf Plots

1. Some adults and some teenagers were polled about their television viewing hours. This back-to-back stem-and-leaf plot shows the results.

Television viewing hours		
Teens	Stem	Adults
	0	.1 .2 .3 .3 .5 .5 .8 .8 .9
.4 .5 .9	1	.0 .0 .1 .1 .4 .4 .7 .7
.0 .0 .4 .6 .7 .9	2	.0 .0 .2 .2 .4 .5 .8 .9
.0 .0 .2 .3 .3 .4 .4 .5 .5 .9 .9	3	.1 .2 .2 .5 .5 .7 .8
.0 .0 .2 .3 .4 .5 .7	4	.2 .4
.0 .1 .3 .6	5	.1
.2 .5 .5	6	

- a. Which group watches the television more hours, on average?
 b. Find the medians for both teens' and adults' television viewing hours.
2. a. Make a stem-and-leaf plot of this data. Divide the interval from 20-29 to five stems.
 b. Find the median age. c. Find the mean.

Ages of an undergraduate Calculus 1 class:

28 24 22 21 25 23 19 20 20 20 20 21 17 20 18 18 19 22 22 24 25 19 20

Stem	Leaf
1	7
1	8 8
2	
2	
2	
2	
2	

3. Make a back-to-back stem-and-leaf plot from the weight loss study's February and April data.
- a. Initial weights (February) of 14 women in a weight loss study (in pounds):
 189 176 186 200 204 188 175 179
 188 190 199 194 187 195
- b. Weights of the same women two months later (April):
 180 166 175 183 189 177 170 171
 170 184 188 182 180 185
- c. Find the medians of the February and April data. How much did the median change?