

Basic Alg 1.7

Construct and interpret line graphs,

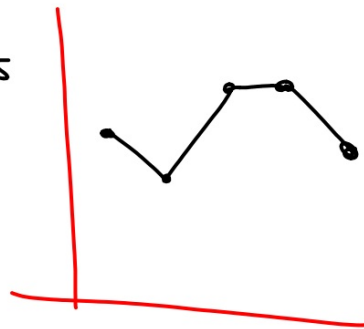
Construct and interpret histograms, and stem-and-leaf plots

line graph Show trends

histogram (bar graph) Categories

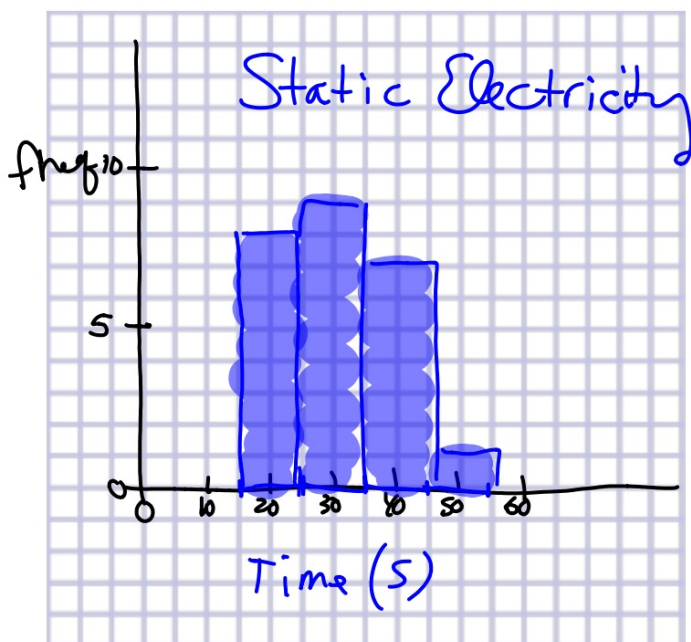
~~cumulative frequency histogram~~

stem and leaf plot organize

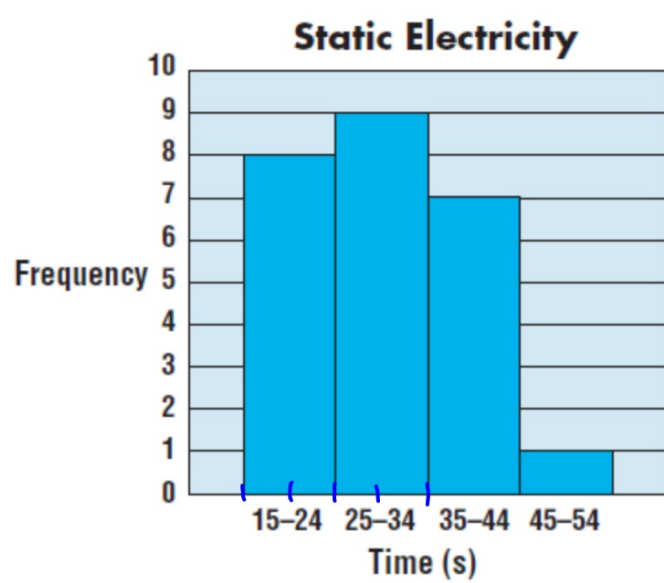


The frequency table is from Example 2 in Lesson 1–6. It shows the various time intervals that “charged” balloons remained stuck to the wall. Construct a histogram of the data.

Static Electricity		
Time (s)	Tally	Frequency
15–24	III	8
25–34	IIII	9
35–44	II	7
45–54	I	1

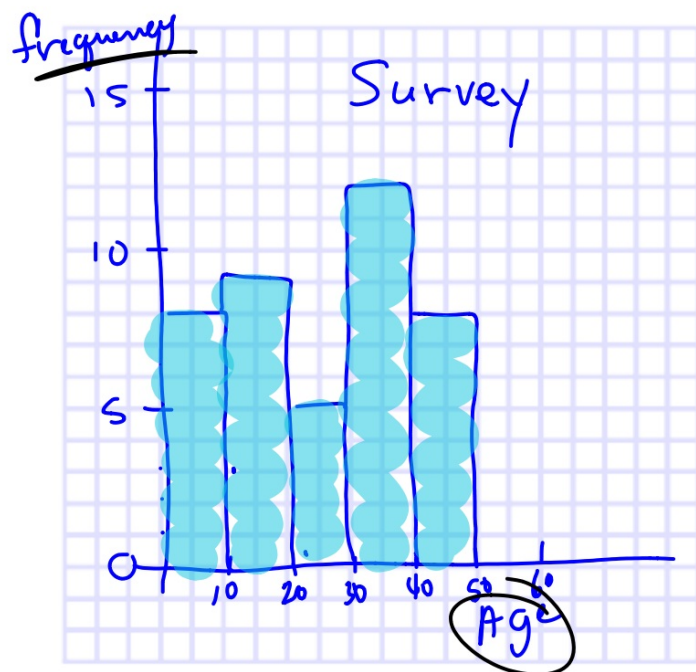


- Equal intervals on each axis
- All bars same width and touch each other

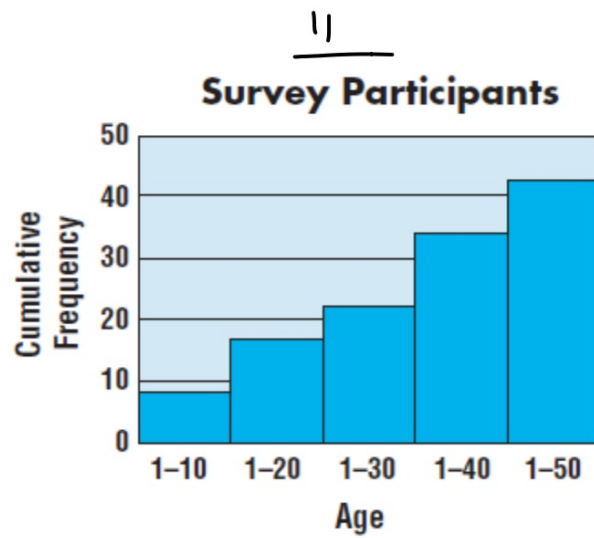


Survey		
Age	Tally	Frequency
1-10	III	8
11-20	III	9
21-30	III	5
31-40	III III	12
41-50	III	8

Spacing
Labels
Title
Graph



Survey		
Age	Frequency	Cumulative Frequency
1-10	8	
11-20	9	
21-30	5	
31-40	12	
41-50	8	



The greatest common place value for each data item is used to form the *stem*.

Stem	Leaf
1	1 6
2	1 3 9
3	
4	5 5

The *leaves* are formed by the next greatest place value.

$2|3 = 23$

A *key* is always included. This shows how the digits are related.

11, 16, 21, 23, 29
45, 45

Stem	Leaf
10	2 8
11	4 5
12	5 7
13	1 9

$$\underline{11} | \underline{5} = \underline{115}$$

$$12 | 5 = 125$$

Always include a key:

4

The table shows the class results on a 50-question test. Make a stem-and-leaf plot of the grades.

Class Scores					
29	37	48	40	17	34
28	43	37	35	49	29
13	29	42	45	37	46

Stem	Leaf
1	7, 3
2	9, 8, 9, 9
3	7, 4, 7, 5, 7
4	8, 0, 3, 9, 2, 5, 6

$$\boxed{2|9=29}$$

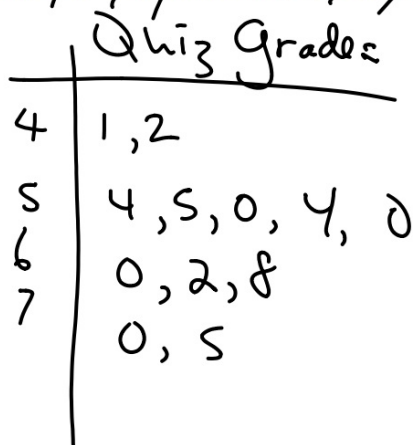
Stem	Leaf
1	7 3
2	9 8 9 9
3	7 4 7 5 7
4	8 0 3 9 2 5 6

1	3 7
2	8 9 9 9

Your Turn

c. Make a stem-and-leaf plot of the quiz grades below.

~~54~~, ~~55~~, ~~60~~, ~~42~~, ~~41~~, ~~75~~, ~~50~~, ~~68~~, ~~62~~, ~~54~~, ~~70~~, ~~50~~



$$6 | 2 = 62$$

$$5 | 4 = 54$$

