## Section 10.1: Frequency Distributions & Stem-and-Leaf Plots

Example 1: A survey asked 30 business executives how many college units in management each had.

3	25	22	16	0	9	14	8	34	21
15	12	9	3	8	15	20	12	28	19
17	16	23	19	12	14	29	13	24	18

- a) Group the data and make a frequency distribution.
  - 1. Lowest number
  - 2. Highest number
  - 3. Interval size
- b) Draw a histogram and frequency polygon

c) Construct a stem-and-leaf plot

Section 10.2: Measures of Central Tendency

Three Measures of Central Tendency:

- 1. Mean average of the numbers,  $\overline{X}$
- 2. Median middle number

(data arranged in order)

3. Mode – number that occurs most frequently

Example 2: For this set of numbers— 44 41 25 36 67 51

- a) Find the mean
- b) Find the median
- c) Find the mode
- Example 3: Find the mean for this frequency distribution—

Value	Frequency
3	4
5	2
9	1
12	3

Example 4: For this set of grouped data—

## Section 10.2: Measures of Central Tendency

(Refer to Example 1)

Interval	Frequency
0-4	3
5-9	4
10-14	6
15-19	8
20-24	5
25-29	3
30-34	1

- a) Find the mean
- b) Find the modal class

Example 5: Find the mode for this set of numbers

57 38 55 55 80 87 98