Basic Algebra 1.6
Collect and organize data using sampling
Collect and organize data using frequency tables

data
sample
frequency table
tally marks
cumulative frequency table

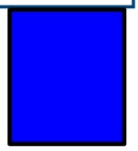
friendly
4-8 groups
same size

Sampling Criteria

A good sample is:

- representative of the larger population,
- selected at random, and
- large enough to provide accurate data. $n \geq 30$

Static Electricity		
Time (s)	Frequency	Cumulative Frequency
15–24	8	8
25–34	9	17
35–44	7	24
45–54	1	25

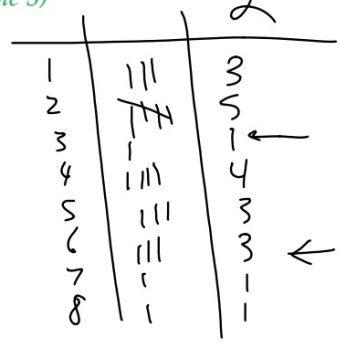


running total

Refer to the chart at the right.

5. Make a frequency table to organize the data. *(Example 2)*
6. What number of goals was scored most frequently? *(Example 3)* 2
7. How many times did the team score 8 goals? *(Example 3)* 1
8. How many more times did the soccer team score six goals than three goals? *(Example 3)* 2

Number of Soccer Goals Scored This Season		
1	2	5
1	6	2
6	8	4
2	4	5
5	1	3
4	7	2
2	6	4



Goal: 4-8 groups

Determine whether each is a good sample. Describe what caused the bias in each poor sample. Explain.

10. Thirty people standing in a movie line are asked to name their favorite actor. no

11. Police stop every fifth car at a sobriety checkpoint. no

12. Every other household in a neighborhood of 240 homes is surveyed to determine how many people in the area recycle. yes

13. Every other household in a neighborhood of 20 homes is surveyed to determine the country's favorite presidential candidate. no

14. Every third student on a class roster is surveyed to determine the average number of hours students in the class spend on a computer. no

15. All people leaving a sporting goods store are asked to name their favorite golfer. no