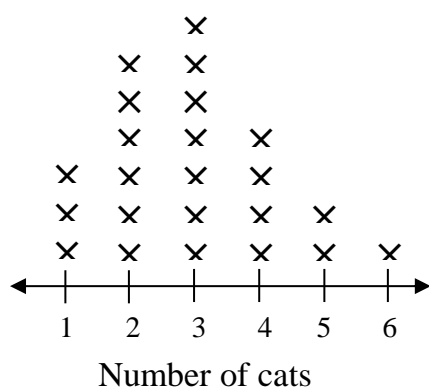# Collect and Organize Data- II

1. An ice cream store manager wants to survey children ages 13-18 years old. Explain whether each sample represents the population. If not, why?
   a. Random sample of 60 children
   b. Random sample of 60 children, ages 13-18
   c. Random sample of 60 people
   d. Random sample of 60 children at school

   Solution:
   a.
   b.
   c.
   d.

2. Lorie did a survey among her classmates to find out how many cats they have in their homes. The data is presented in the line plot below. Use the line plot to solve the following problems.

Number of cats

   a. What is the range of number of cats?
   b. Which count of cats has the greatest frequency?
   c. Which count of cats has the least frequency?
   d. How many classmates were surveyed?

   Solution:
   a.   c.

   b.   d.

3. Use the tally table to solve the following problems.

Favorite Ice Cream Flavor in Class	
Flavor	Tally
Vanilla	⊩⊩⊦ |||
Chocolate	⊩⊩⊦ ||||
Strawberry	⊩⊩⊦ ||
Cookies & Cream	⊩⊩⊦ ⊩⊩⊦
Mint Chocolate	||

   a. Make a frequency table of the collected data.
   b. Make a line plot.
   c. What is the range?
   d. Is there an outlier in the data?
   e. How many students were surveyed?
   f. Which flavor of ice cream has the least frequency?

   a.   b.   c.
                                                          d.
                                                          e.
                                                          f.

4. Jake ran for 2, 3, 6, 4, 5, 4 and 7 miles on various days of the week. Which of the following is the range of the data?
   A. 3   B. 4   C. 5   D. 6

   Solution:

1. An ice cream store manager wants to survey children ages 13-18 years old. Explain whether each sample represents the population. If not, why?
   a. Random sample of 60 children
   b. Random sample of 60 children, ages 13-18
   c. Random sample of 60 people
   d. Random sample of 60 children at school

   Solution: Sample is a subset of population
   a. No, some respondents are not 13-18 years old
   b. Yes
   c. No, some respondents are not children
   d. No, some respondents are not 13-18 years old

2. Lorie did a survey among her classmates to find out how many cats they have in their homes. The data is presented in the line plot below. Use the line plot to solve the following problems.

   1 2 3 4 5 6
   Number of cats
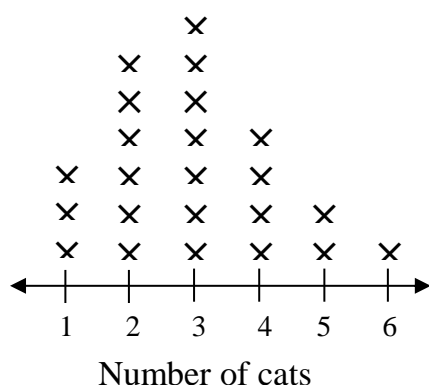
   a. What is the range of number of cats?
   b. Which count of cats has the greatest frequency?
   c. Which count of cats has the least frequency?
   d. How many classmates were surveyed?

   Solution:
   a. Range = 5   c. 6

   b. 3   d. 23

3. Use the tally table to solve the following problems.

Favorite Ice Cream Flavor in Class	
Flavor	Tally
Vanilla	⃥⃥⃥⃥ |||
Chocolate	⃥⃥⃥⃥ ||||
Strawberry	⃥⃥⃥⃥ ||
Cookies & Cream	⃥⃥⃥⃥ ⃥⃥⃥⃥
Mint Chocolate	||

   a. Make a frequency table of the collected data.
   b. Make a line plot.
   c. What is the range?
   d. Is there an outlier in the data?
   e. How many students were surveyed?
   f. Which flavor of ice cream has the least frequency?

   a.

Favorite Ice Cream Flavor in Class	
Flavor	Frequency
Vanilla	8
Chocolate	9
Strawberry	7
Cookies & Cream	10
Mint Chocolate	2

   b.

   Vanilla Choco Strawberry C&C Mint Choco
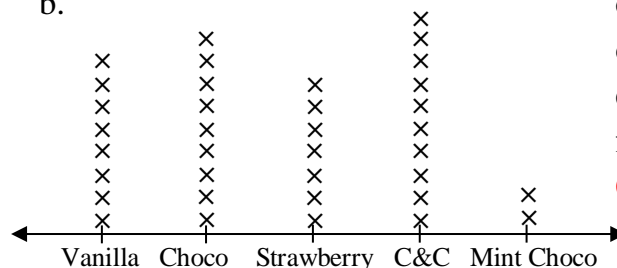
   c. Range = 8
   d. Yes, 2
   e. 36
   f. Mint Chocolate

4. Jake ran for 2, 3, 6, 4, 5, 4 and 7 miles on various days of the week. Which of the following is the range of the data?
   A. 3   B. 4   C. 5   D. 6

   Solution: C