9.1

Introduction to Statistics

(& Fractions Review)

Converting

Convert the following to improper fractions:

1) $8\frac{3}{5}$

Convert the following to mixed number:

2) $\frac{85}{50}$

Adding and Subtracting Fractions

a) $\frac{11}{12} - \frac{2}{9}$

b) $\frac{8}{9} + \frac{5}{6}$

Adding and Subtracting Mixed Numbers

c) $4\frac{5}{6} - 2\frac{1}{8}$

d) $5\frac{1}{6} + 2\frac{9}{10}$

Multiplying Fractions and Mixed numbers

e) $\frac{2}{25} \times \frac{5}{6}$

f) $2\frac{4}{9} \times 3\frac{6}{11}$

Dividing Fractions and Mixed Numbers

g) $\frac{9}{10} \div \frac{2}{5}$

h) $6\frac{2}{3} \div 1\frac{1}{4}$

What is STATISTICS??

Statistics is the _____ of collecting, organizing, analyzing, and interpreting _____.

A **statistical question** is one for which you do not expect to get a _____. Instead, you expect a _____ of answers, and you are interested in the distribution and tendency of those answers.

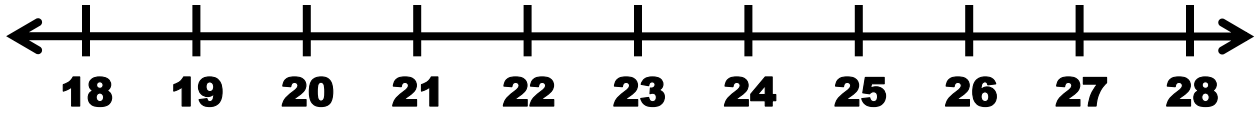
Example 1 – Dot Plots

You conduct a science experiment on house mice. Your teacher asks you, "What is the weight of a mouse?"

a. Is this a statistical question? Explain.

Weights (grams)			
20	19	21	20
18	20	27	21
28	23	20	19
20	21	18	27
19	22	21	20

b. You weigh some mice and record the weights (in grams) in the table. Display the data in a dot plot. Identify any clusters, peaks, or gaps in the data.



Example 1 – Dot Plots

c. Use the distribution of the data to answer the question.

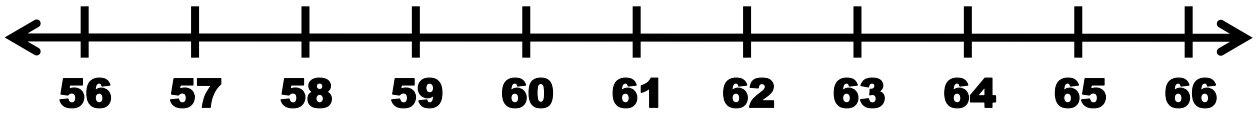
Practice

The table shows the ages of some people who retired early. You are asked, "How old are people who retire early?"

Ages			
60	61	59	60
62	56	64	59
58	60	61	60
59	60	58	61

a. Is this a statistical question? Explain.

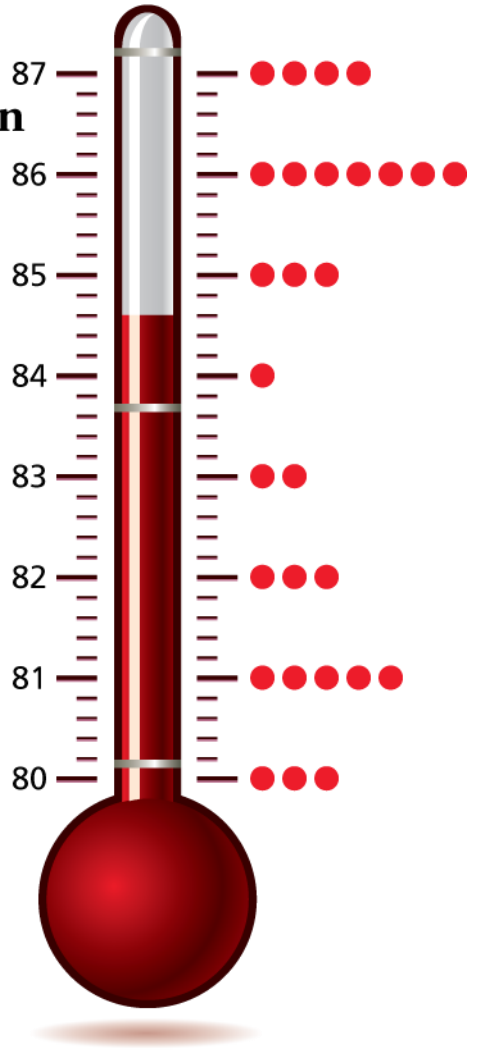
b. Display the data in a dot plot. Identify any clusters, peaks, or gaps in the data.



c. Use the distribution of the data to answer the question.

Example 2 – Using a Dot Plots

You record the high temperature every day while at summer camp in August. Then you create the vertical dot plot.



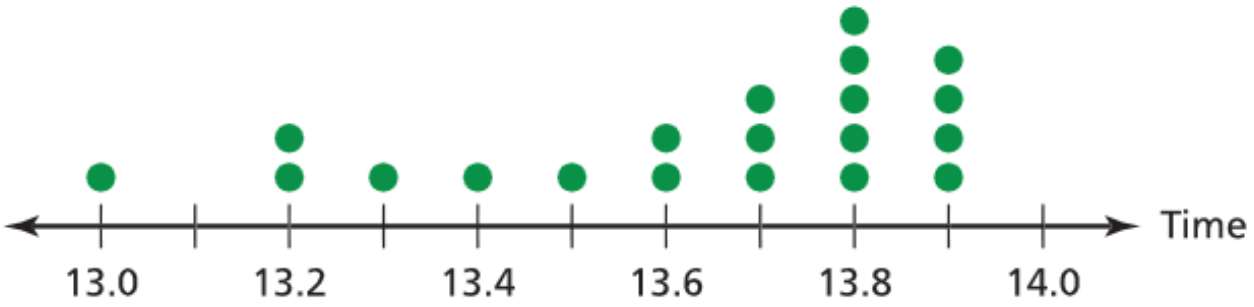
a. How many weeks were you at summer camp?

b. How can you collect these data? What are the units?

c. Write a statistical question that you can answer using the dot plot. Then answer the question.

Practice

The dot plot shows the times of sixth grade students in a 100-meter race.



a. How many students ran in the race?

b. How can you collect these data? What are the units?

c. Write a statistical question that you can answer using the dot plot. Then answer the question.