Unit 1 Math Test Review

Name: _____ #: _____

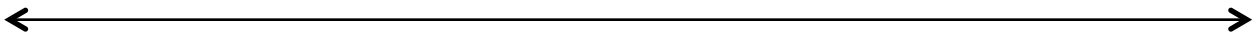
Parent Signature (test alert): _____

Test is on: _____

1. Draw a dot plot for the following spelling test scores:

100, 100, 95, 90, 92, 93, 93, 90, 94, 90, 97

Title of the Graph: _____



_____
(unit)

Use your dot plot to find the following landmarks.

Maximum: Minimum: Range:

Mode(s): Mean:

2. Students in Mr. Williams' Saturday art class are 15, 19, 47, 14, 15, 19, and 11 years old.

a. Find the median: _____ and the mean: _____ .

b. Which better represents students' ages? Explain. _____

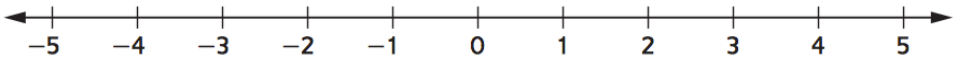
_____

3. a. Which questions below are statistical? Circle ALL of the answers.
   A. What is the average low temperature for the month of October in Saline?
   B. How many pets do the sixth graders in your school have?
   C. What shoe size are you?
   D. How many countries are there in South America?

   b. Explain how you know one of the questions you circled is statistical:

4. Plot the following points.

A: $-1\frac{3}{4}$ B: $4\frac{1}{6}$ C: 0 D: $\frac{4}{5}$ E: -3 F: $3\frac{2}{3}$ G: $-\frac{2}{3}$



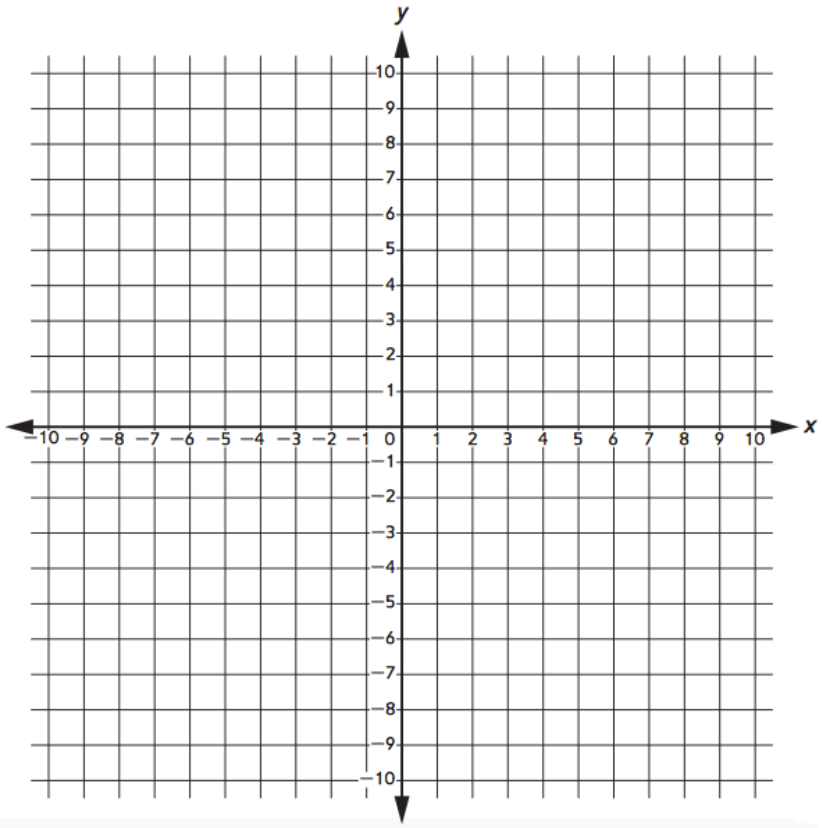
5. Plot and label the following points on the coordinate grid.

A: (5,2)
B: (-1½, 3½)
C: (-2,-2)
D: (-4½, -3)

Plot a point in the quadrant that is not already plotted.

Label it E.

Write the coordinates for your point. _____ , _____



For each statement, circle TRUE or FALSE. If you wish, draw a number line to help you.

6. Every rational number is a counting number. TRUE FALSE

7. A positive number is always greater than a negative number. TRUE FALSE

8. -4 is greater than -5. TRUE FALSE

9. There is a rational number between ¼ and ¾. TRUE FALSE

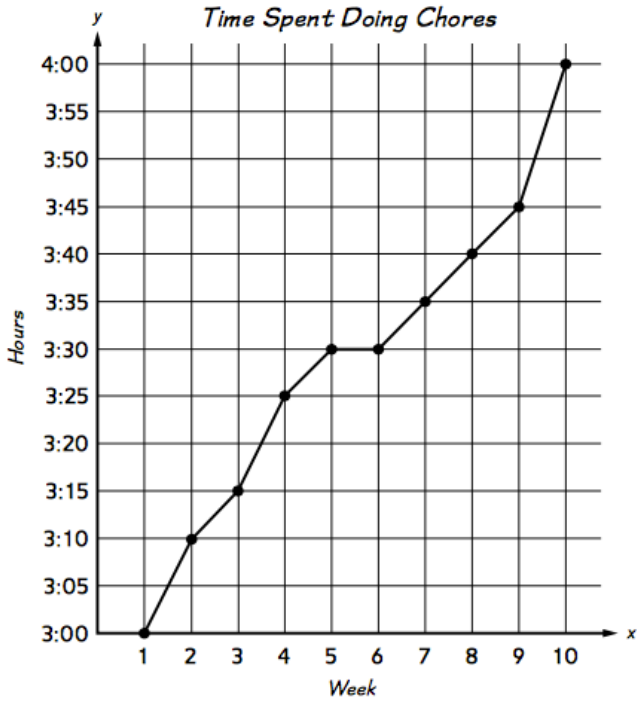
10. a. Order these fractions from least to greatest: $^{8}/_{9}$, $^{6}/_{12}$, $^{4}/_{3}$, $^{1}/_{5}$, $^{6}/_{8}$

b. Stevie says that there are no numbers between $^{1}/_{3}$ and $^{1}/_{4}$. Why might he think that and what would you tell him?

11. Frankie gave his parents this graph based on the amount of time he was spending doing chores.

Based on this graph, they thought he had doubled his time doing chores.

What do you think? Use the graph to defend your argument.



12. Use the histogram.

a. Write one statistical question you could answer based on the information in the graph.

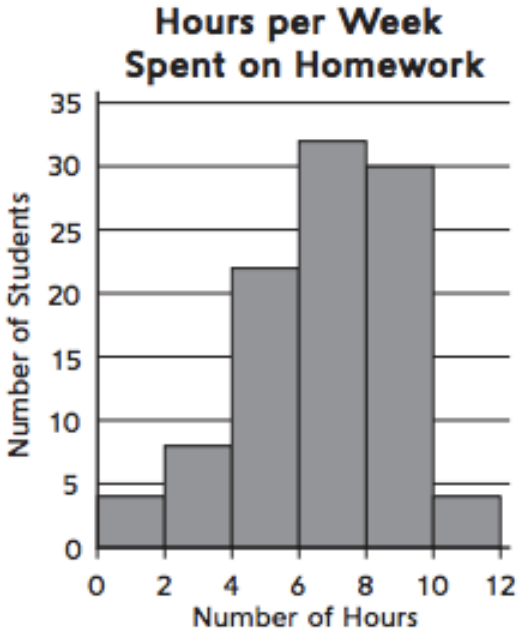
_____

_____

b. List one statistical question you cannot answer based on the graph.

_____

_____

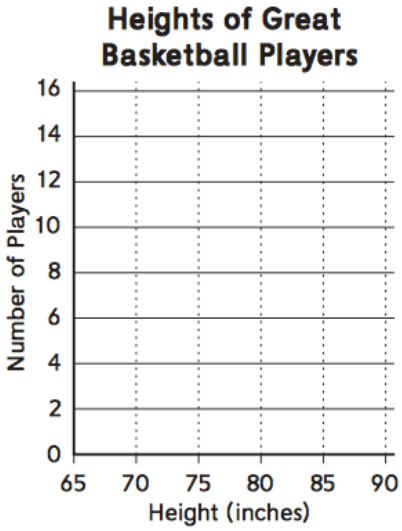


c. Draw a line approximately where you think the mean is on this graph.

13. a. The table below shows the heights of great basketball players in order from tallest to shortest.

Use the data to make a histogram.

Heights of Great Basketball Players in Inches										
89	88	86	86	85	85	85	84	84	84	82
82	82	82	81	81	81	81	80	80	80	80
79	79	78	78	78	75	75	73	70	70	69



b. What is the title of the graph? _____

c. What is the unit on the x axis? _____

d. What's the unit on the y axis? _____

For the following questions, record whether you can determine the answer based on the graph. If you can, write the answer.

e. How many players are included in the graph? _____

f. How many heights are below 75 inches? _____

g. How many heights are exactly 81 inches? _____

Unit 1 Math Test Review

Name: Answer Key #: _____

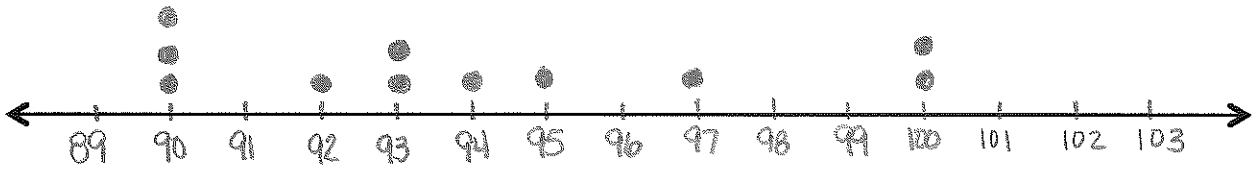
Parent Signature (test alert): _____

Test is on: _____

1. Draw a dot plot for the following spelling test scores:

100, 100, 95, 90, 92, 93, 93, 90, 94, 90, 97

Title of the Graph: Spelling Test Scores



Score (percents)
(unit)

Use your dot plot to find the following landmarks.

Maximum: 100 Minimum: 90 Range: 10

Mode(s): 90 Mean: 94

2. Students in Mr. Williams' Saturday art class are 15, 19, 47, 14, 15, 19, and 11 years old.

a. Find the median: 15 and the mean: 20. 11, 14, 15, 15, 19, 19, 47 ? a lot older

b. Which better represents students' ages? Explain. The median, 15, better represents their ages. The outlier, 47, raises the mean.

3. a. Which questions below are statistical? Circle ALL of the answers.

A. What is the average low temperature for the month of October in Saline?
B. How many pets do the sixth graders in your school have?
C. What shoe size are you?
D. How many countries are there in South America?

b. Explain how you know one of the questions you circled is statistical:

To decide how many pets the average 6th grader has I would have to collect data! *Non-statistical questions ask one person a question or has one specific answer.

4. Plot the following points.

A: $-1\frac{3}{4}$ B: $4\frac{1}{6}$ C: 0 D: $\frac{4}{5}$ E: -3 F: $3\frac{2}{3}$ G: $-\frac{2}{3}$

5. Plot and label the following points on the coordinate grid.

A: (5,2)
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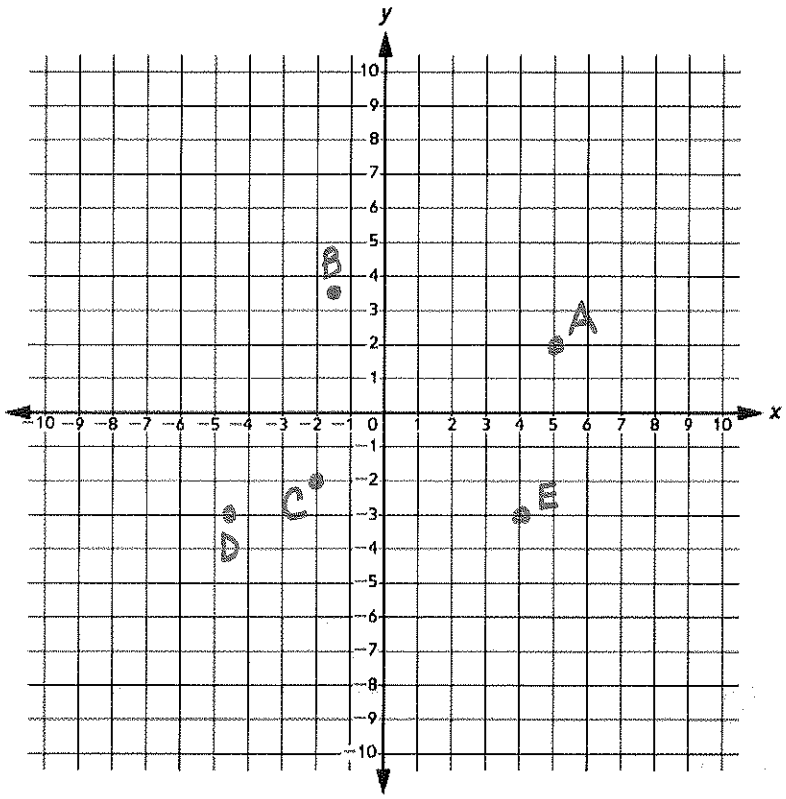


Plot a point in the quadrant that is not already plotted.

Label it E.

Write the coordinates for your point. (4 , -3)

For each statement, circle TRUE or FALSE. If you wish, draw a number line to help you.

6. Every rational number is a counting number. TRUE (FALSE)

7. A positive number is always greater than a negative number. (TRUE) FALSE

8. -4 is greater than -5. (TRUE) FALSE

9. There is a rational number between ¼ and ¾. (TRUE) FALSE

10. a. Order these fractions from least to greatest: $^{8}/_{9}$, $^{6}/_{12}$, $^{4}/_{3}$, $^{1}/_{5}$, $^{6}/_{8}$

$\frac{1}{5}, \frac{6}{12}, \frac{6}{8}, \frac{8}{9}, \frac{4}{3}$

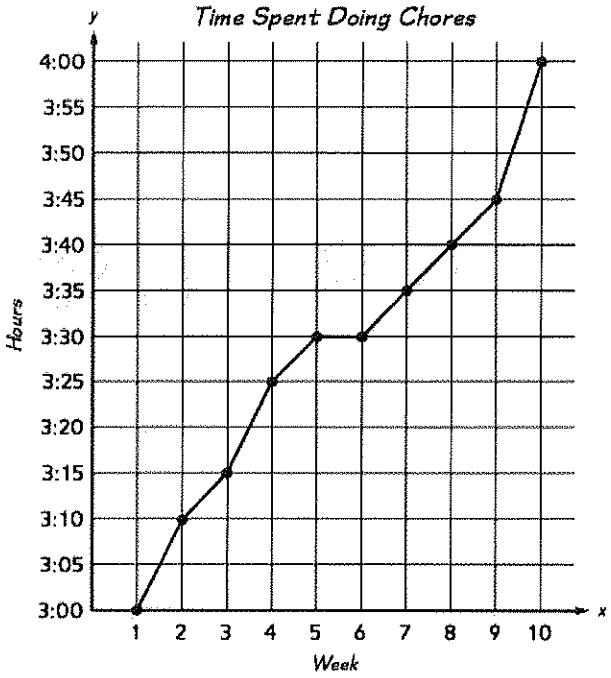
b. Stevie says that there are no numbers between $^{1}/_{3}$ and $^{1}/_{4}$. Why might he think that and what would you tell him?

Stevie might think that because there are no whole numbers between 3 & 4 (the denominators). If he finds a common denominator he would see that $\frac{7}{24}$ is between $\frac{1}{4}$ & $\frac{1}{3}$!

$\frac{1}{3} = \frac{8}{24}$

$\frac{1}{4} = \frac{6}{24}$

11. Frankie gave his parents this graph based on the amount of time he was spending doing chores.



Based on this graph, they thought he had doubled his time doing chores.

What do you think? Use the graph to defend your argument.

I don't believe he doubled his time on chores! In 9 weeks (horizontal axis) the time he spent on chores (vertical axis) increased from 3 hours to 4 hours. If he had doubled his time he would have spent 6 hours on chores. The graph is so steep because the vertical axis increases by 5 minute increments.

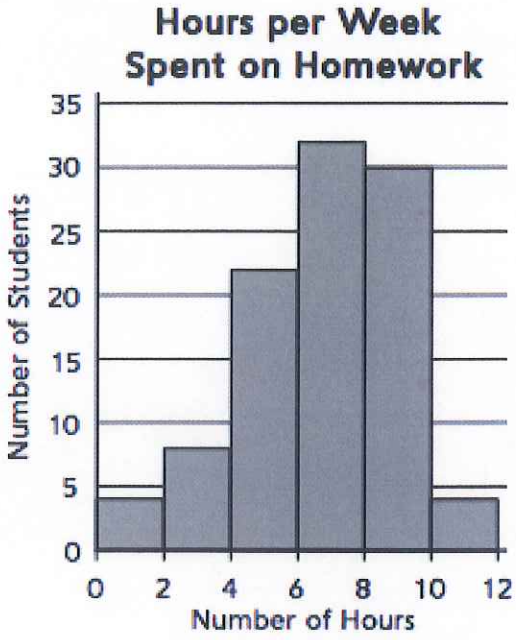
12. Use the histogram.

a. Write one statistical question you could answer based on the information in the graph.

About how many hours does the average student spend on homework?

b. List one statistical question you cannot answer based on the graph.

How many students spend 7 hours on homework?



c. Draw a line approximately where you think the mean is on this graph.

13. a. The table below shows the heights of great basketball players in order from tallest to shortest.

Use the data to make a histogram.

Heights of Great Basketball Players in Inches										
89	88	86	86	85	85	85	84	84	84	82
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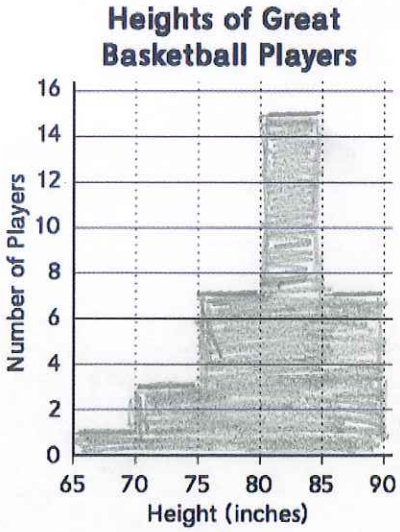

b. What is the title of the graph? Heights of Great Basketball Players

c. What is the unit on the x axis? Height (inches)

d. What's the unit on the y axis? Number of Players

For the following questions, record whether you can determine the answer based on the graph. If you can, write the answer.

e. How many players are included in the graph? 33

f. How many heights are below 75 inches? 4

g. How many heights are exactly 81 inches? Can't answer based on graph