

Name:

## Unit 1 Study Guide

Skill: Can recognize, explain, and write statistical questions.

Julie is curious about how long kids her age spend on their cell phones.

Write 1 non-statistical question she could ask.

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Write 1 statistical question she could ask.

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Circle or highlight the word that makes your question statistical.

Skill: Find the mean, median, mode and range of a data set.

Pages Read in One Hour

20, 45, 34, 19, 37, 28, 22, 22, 34

Calculate the following data landmarks for this data set:

Maximum:

Minimum

Range:

Median:

Mode:

Mean:

Skill: Read or make a dot plot and histogram

Create a histogram for the following data set:

Daily High Temperatures for September 2018

75, 84, 82, 80, 85, 79, 75, 78, 84, 76, 70, 62, 72, 86, 94, 95, 93,  
92, 87, 78



Juan rolled a set of dice 20 times. Create a dot plot to show his results.

10, 11, 7, 4, 3, 5, 7, 7, 4, 9, 9, 4, 11, 4, 4, 7, 7, 6, 5, 7



Choose the appropriate landmark to summarize a data set based on the context.

This table shows the calories in different burgers. Calculate the mean and median for the data.

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

| Burger | Calories |
|--------|----------|
| A      | 315      |
| B      | 355      |
| C      | 320      |
| D      | 365      |
| E      | 650      |
| F      | 365      |

Which landmark better represents the calories of the burgers?

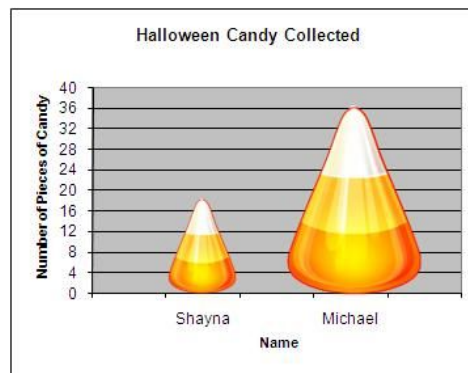
Explain why.

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Skill: Interpret persuasive graphs.



Michael made this graph to prove to Shayna that he gathered tons more candy than she did. Explain why this graph is misleading. Give specific examples and use vocabulary.

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Skill: Use graphs to ask and answer questions. Describe overall patterns.

Describe the shape of this graph.

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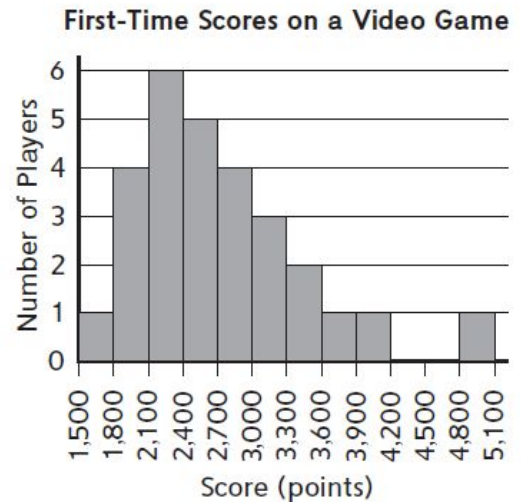
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Explain WHY the graph of this data set might have this shape?

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Write one statistical question that you could answer from this graph.

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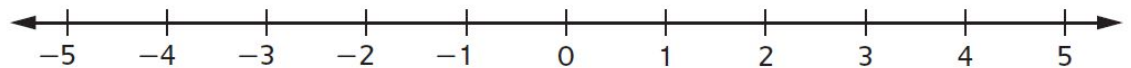
What is one thing that you cannot tell from this graph.

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Skill: Order rational numbers on a number line and find rational number between numbers.

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:  $-\frac{2}{3}$



Plot and label 2 points between points G and D. Label these points with the number they represent.

Skill: Plot ordered pairs of rational numbers on a four quadrant coordinate grid.

- ① Plot the following points on the coordinate grid. Label each with its letter.



A: School: (8, 0)

B: Library: (8, 5)

C: Park: (1, -3)

D: Grocery store: (-4, -2)

E: My house: (6, 3)

F: Post office: (1, 9)

G: Bank: (-5, 7)

H: Friend's house: (-4, 3)

- ② You walk a straight line from your house to your friend's house. Plot the point that is halfway between the two houses. Label this point *M*.

Write the ordered pair for point *M*. \_\_\_\_\_

- ③ Plot and label two points on the coordinate grid. Place your points in different quadrants.

