| Name: _ | | | |
|---------|--|------|---|
| _ | | | _ |
| Block: | | | |

Statistical Measures

| Mean | The sum of data divided by the number of values in the data set | | | | | |
|--|---|------|------|------|------|-------|
| (10.77 + 5.71 + 6.78 + 5.65 + 8.58 + 5.71) ÷ 6 = 7.20 | | | | | | |
| Median | The middle data value of a set | | | | | |
| | 5.65 | 5.71 | 5.71 | 6.78 | 8.58 | 10.77 |
| (5.71 + 6.78) ÷ 2 = 6.245 | | | | | | |
| Mode | The data value that occurs most frequently | | | | | |
| | 5.65 | 5.71 | 5.71 | 6.78 | 8.58 | 10.77 |
| Mode = 5.71 | | | | | | |
| Range | The difference between the greatest value and the least value | | | | | |
| | 5.65 | 5.71 | 5.71 | 6.78 | 8.58 | 10.77 |
| 10.77 – 5.65 = 5.12 | | | | | | |

Objective: Students will be able to summarize a set of data using a measure of center, such as the mean, median, or mode, or a measure of variability, such as the range.



Anna Stephan, 2019 Jr. Iditarod Champion [photo credit: Brian Hickox]

The following table shows musher Anna Stephan's race speeds during the 2019 Jr. Iditarod Race. Use the data to answer the questions that follow.

| 2019 Jr. Iditarod Checkpoints | Speed (mph) |
|---|-------------|
| Knik Lake to Su River | 11.76 |
| Su River to Eagle Song | 6.16 |
| Eagle Song to Yentna Station | 7.50 |
| Yentna Station to Eagle Song | 8.16 |
| Eagle Song to Old Hunter Trail | 9.69 |
| Old Hunter Trail to Willow Community Center | 9.56 |

1. The table shows Anna's race speeds between checkpoints throughout the 2019 Jr. Iditarod. Find the mean of Anna's speeds.

a. First, find the <u>sum</u> of the speeds.

<u>sum</u> =_____

b. **Next**, **DIVIDE** the <u>sum</u> by the number of values in the data set.

_____÷____=____.

c. The mean of Anna's speeds during the 2019 Jr. Iditarod Race is _____



[photo credit: Brian Hickox]

2. The table shows Anna's race speeds between checkpoints throughout the 2019 Jr. Iditarod.

a. Find the median of the data. List the data in order from least to greatest.

<u>median</u> = _____

b. Find the <u>mode</u> of the data.

<u>mode</u> = _____

c. Find the <u>range</u> of the data.



[Photo Credit: Brian Hickox]

Use the 2019 Jr. Iditarod Race statistics to complete the following section. Select one of the following Jr. Iditarod mushers:

- Anna Coke
- Grace Hill
- Ida Kohnert
- <u>Cassidy Meyer</u>
- Bjorn Keller
- Johanna Badalich

<u>Record</u> his/her race speeds between the various checkpoints from the 2019 Jr. Iditarod on the table below.

| Musher's Name: | |
|---|-------------|
| 2019 Jr. Iditarod Checkpoints | Speed (mph) |
| Knik Lake to Su River | |
| Su River to Eagle Song | |
| Eagle Song to Yentna Station | |
| Yentna Station to Eagle Song | |
| Eagle Song to Old Hunter Trail | |
| Old Hunter Trail to Willow Community Center | |

Now, find the mean, median, mode, and range for your data set.

*Record your answers on a separate sheet of paper. Make sure you show all of your work.

