Name: $\qquad$
Block: $\qquad$

## Statistical Measures

| Mean | The sum of data divided by the number of values in the data set |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(10.77+5.71+6.78+5.65+8.58+5.71) \div 6=7.20$ |  |  |  |  |  |  |
| Median | The middle data value of a set |  |  |  |  |  |
|  | 5.65 | $5.71$ | $\begin{array}{r} 5.71 \\ 1+6 . \end{array}$ | $\begin{aligned} & 6.78 \\ & \div 2= \end{aligned}$ | $\begin{aligned} & 8.58 \\ & 45 \end{aligned}$ | $10.77$ |
| Mode | The data value that occurs most frequently |  |  |  |  |  |
|  | 5.65 | 5.71 | $5.71$ <br> Mod | $\begin{aligned} & 6.78 \\ = & 5.71 \end{aligned}$ | $8.58$ | 10.77 |
| Range | The difference between the greatest value and the least value |  |  |  |  |  |
|  | 5.65 | 5.71 | 5.71 $.77-$ | 6.78 $65=5$ | $8.58$ | $10.77$ |

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.


$$
\text { sump }=
$$

$\qquad$
b. $\mathbb{N} \in \leq$, DIVIDE the sum by the number of values in the data set.
$\qquad$ $\div$ $\qquad$ $=$ $\qquad$ .
c. The mean of Anna's speeds during the 2019 Jr. Iditarod Race is $\qquad$ .

[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.
median = $\qquad$
b. Find the mode of the data.
mode $=$ $\qquad$
c. Find the range of the data.
$\qquad$ $-$ $\qquad$ $=$ $\qquad$

[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
- Cassidy Meyer
- Bjorn Keller
- Johanna Badalich

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

| Musher's Name: |  |
| :--- | :---: |
| 2019 Jr. Iditarod Checkpoints |  |
| Knik Lake to Su River | Speed (mph) |
| 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.


