Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Week of Tuesday, January 22nd – Thursday, January 24th Guided Notes: Data Analysis**

**Tuesday, January 22nd**

**> Do Now:**

1. Ms. Misconish runs 26.2 miles in 5.5 hours. What was her speed?
2. Order the following numbers from least to greatest: A) 3% B) 1/3 C)30% D)√9
3. If f(x) = 30-0.5x and g(x) = 2x – 15, what is the solution for x when f(x) = g(x)?

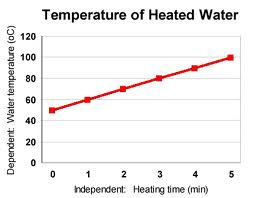
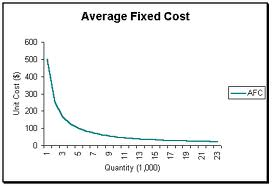
**> Gallery Walk Observations:**

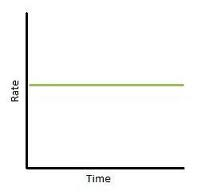
|  |  |
| --- | --- |
| **Graph 1:** | **Graph 2:** |
| **Graph 3:** | **Graph 4:** |
| **Graph 5:** | **Graph 6:** |

**> Interpreting Graphs Vocabulary:**

1. Interpret: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Increase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Decrease: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Constant: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Increasing Graphs Decreasing Graph Constant Graph





**> Interpreting Graph Practice:**

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| --- | --- |
| 1. Based on the graph, which statement best describes the change in Jenny’s heart rate?    1. Jenny’s heart rate increased, then decreased, and then stayed constant.    2. Jenny’s heart rate increased, then stayed constant, and then decreased.    3. Jenny’s heart rate decreased, then increased, and then stayed constant.    4. Jenny’s heart rate decreased, then stayed constant, and then increased. | 1. Based on the graph, which statement best describes the amount of cookies sold?    1. Allison sold 15 more boxes than Ayana.    2. Allison sold 3 times more cookies than Mika.    3. Marisa sold the least amount of cookies.    4. Ayana sold the most cookies. |
| 1. Based on the graph, which statement about the bank account balance is true?    1. The balance was highest near the beginning of the period.    2. The balance was lowest in the middle of this time period.    3. The balance was constant throughout this time period.    4. The balance increased steadily over this time period. | 1. Based on the graph, which statement about the speed is true?    1. The speed increased and then increased.    2. The speed increased and then remained constant.    3. The speed increased and then decreased.    4. The speed decreased and then remained constant |

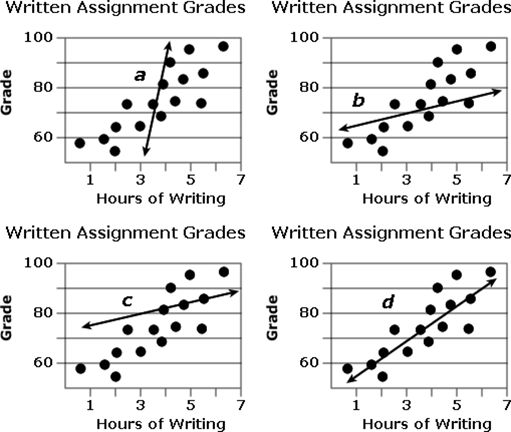
**Wednesday, January 23rd**

**> Do Now:**

Write an equation for the **1. 2.**following graphs in slope intercept form.

**> What Type of Correlation?**

1. 2. 3. 4. 5.

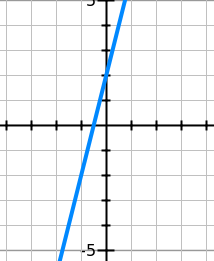
  
  
  
  
  
  
  
  
 **> Scatter Plots:**

* A scatterplot can be used **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
* A best fit line makes this possible.
* **Best fit line/ Line of best fit:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
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**> Making Predictions:**

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| **Example 1:** Based on the info in the graph, what is a logical prediction about the number of gallons of water consumed in week 8 of a drought?     1. About 10 gallons of water will be consumed. 2. About 13 gallons of water will be consumed. 3. About 22 gallons of water will be consumed. 4. About 28 gallons of water will be consumed. | **Example 2:** Based on the information in the graph, what is a logical prediction for the population in New York City in 2001?     1. The population of New York City will be around 18 million people. 2. The population of New York City will be around 20 million people. 3. The population of New York City will be around 25 million people. 4. The population of New York City will be around 29 million people. |
| **Example 3:** Based on the information in the graph, what is a logical prediction for movie sales during the week of 7/16?     1. Movie sales will be around 24 million dollars. 2. Movie sales will be around 20 million dollars. 3. Movie sales will be around 16 million dollars. | **Example 4:** What is a logical prediction about  the temperature inside of the oven at 11 minutes?     1. The temperature inside the oven will be 300° F. 2. The temperature inside the oven will be 325° F. 3. The temperature inside the oven will be 375° F. 4. The temperature inside the oven will be 425° F. |
| **Example 5:** What happens to a person's running speed as they get older?     1. It increases. 2. It decreases. 3. It stays the same. 4. It increases, then decreases. | **Example 6:** The scatter plot shows the arm span of 8th grade students according to their height. If a student in this class is 62 inches tall, what is their approximate arm span   1. 52 in. 2. 55 in. 3. 62 in. 4. 72 in. |
| **Example 7:** Which statement is true?   1. As a rattlesnake gets older, it grows more beads. 2. As a rattlesnake gets older, it grows fewer beads. 3. A 18-month-old rattlesnake has more beads than a 6-month-old  rattlesnake. 4. There is no relationship between the rattlesnake's age and the number  of beads it has. | |

**Thursday, January 24th**

**>Do Now:**

* Write an equation for the following **1. 2.**  
  graphs in slope intercept form.

**> Best Fit Lines:**

* Sometimes, you will have to determine the equation of the best fit line.
* In order to do this, we will simply use the y-intercept and slope (which we already know how to do! ☺) and check the line.
* How to determine the equation of a best fit line:
  1. Determine if the line has **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  2. Determine the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  3. Determine the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  4. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** with the best fit line.

**\*\* Eliminate any answer choices (if possible) at each step!**

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| **Example 1:** Which of the following equations best fits the scatter plot?  ex1.tiff   1. y = 5x + 15 2. y = 40 3. y = 5x + 55 4. y = 3x + 10 | **Example 2:** Which of the following equations represents a line of best fit for this scatterplot?     1. y = 5/7x 2. y = 5/6x 3. y = 6/5x 4. y = 9/5x |
| **Example 3:** Which equation best fits the scatterplot?     1. y = 2x + 0.5 2. y = 1/3x + 0.5 3. y = ½x + 0.5 4. y = ½x | **Example 4:** Which equation best fits the scatterplot?     1. y = x + 8 2. y = x – 8 3. y = -x + 8 4. y = -x – 8 |
| **Example 5:** Write an equation for scatter plot below. | **Example 6:** Write an equation for scatter plot below. |
| **Example 7:** Write an equation for scatter plot below. | **Example 8:** Write an equation for scatter plot below. |
| **Example 9:** Write an equation for scatter plot below. | **Example 10:** Write an equation for scatter plot below. |
| **Example 11:** | |