**Alg 1/2**, Unit 5: Two-Variable Statistics #35

**Day 35: Scatter Plots**

**Read this diagram explaining important qualities of scatterplots:**

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**FInd the Errors**

Each scatterplot below has graphed the data in the table as a scatter plot. Use your understanding of what a GOOD scatter plot is to describe the mistakes in each problem. Write your explanations on your OWN piece of paper.



**How accurate are you at guessing people’s ages??**

All of the people listed below are celebrities. Write in your GUESS of their age, even if you don’t know who it is. Then when you’re done, I’ll show you their ACTUAL age. Record their actual age below too.

|  |  |  |
| --- | --- | --- |
| **Person** | **Guess** | **Actual Age** |
| Barack Obama |  |  |
| Katy Perry |  |  |
| Stephani Germanotta |  |  |
| Lebron James |  |  |
| Ashley Nicolette Frangipane |  |  |
| Ms. Maiden |  |  |
| Jay-Z |  |  |
| Sarah Hyland |  |  |
| Robert De Niro |  |  |
| Rico Rodriguez |  |  |

 **Celebrity Ages**



 **Guessed Age**

**Actual Ages**

**Line of Best Fit**

**In many of your classes, you may be asked to predict a value based off of given data. You can do this by finding the line that best fits the data.**

**Step 1:** Create a scatterplot of the data below showing how many hours students watched television the night before their Physics test.





Use the data to predict a reasonable test score for someone who

watched 4 hours of TV the night before the test. Explain.

**Step 2:** Does the data show a positive OR negative correlation? Y or N

If **yes**, then a line that best fits the data can be drawn!

**Step 3:** Draw a line that appears to fit the data closely. There

should be ***approximately*** as many points above the line as below it.

**Commons Misconceptions:**

**1)**



Students in Mrs. Stark’s class did a “Breaking Bridges” experiment. In this experiment they simulated making bridges out of paper layers and put a cup of pennies on the bridge. They recorded the number of layers and the number of pennies that made the bridge break.

1. Make a scatterplot of the data →
2. Describe the correlation of the data in the

scatterplot.

1. Draw a line of best fit that can be used to estimate data.
2. Predict how many pennies will make the bridge break when there are 10 layer.