**Practice Sample Data Worksheet**

Using the data provided in the *Practice Sample Data Spreadsheet*, answer the following questions using formulas provided by Google Sheets. Once completed, represent the data graphically using the GeoGebra graphical app.

1. Calculate the mean temperature of each of the four samples.

|  |  |  |  |
| --- | --- | --- | --- |
| Sample 1 | Sample 2 | Sample 3 | Sample 4 |
|  |  |  |  |

2. Calculate the standard deviation of each of the four samples.

|  |  |  |  |
| --- | --- | --- | --- |
| Sample 1 | Sample 2 | Sample 3 | Sample 4 |
|  |  |  |  |

3. Calculate the standard deviation for each hour recorded on the sensor.

Then calculate the mean of these standard deviations.

Mean standard deviation at each hour = \_\_\_\_\_\_\_\_\_\_\_\_\_

4. What does this standard deviation mean in the context of this data?

Using graphing software (GeoGebra, Google Sheets, Excel), produce the following graphs.

5. Construct a box plot for each of the samples.

6. Construct a time plot for each of the samples.

7. Calculate the mean between each sample at each hour and construct a time plot.

8. Construct a time plot comparing the standard deviations at each hour and the time.