|  |  |  |
| --- | --- | --- |
| Concentraion (mg/ml) | Absorbance 1 | Absorbance 2 |
| 0.25 | 0.2 | 0.24 |
| 0.75 | 0.42 | 0.48 |
| 1.50 | 0.75 | 0.72 |
| 2.0 | 1.02 | 1.02 |
| 2.5 | 1.29 | 1.34 |
| 3.0 | 1.68 | 1.80 |

1. Make a Scatterplot using the data above. Be intentional with what chart elements you should include, or remove from your figure.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time (Hour) | D1 | D2 | D3 | D4 |
| 1 | 19.8 | 19 | 21.2 | 22 |
| 2 | 19.3 | 19.8 | 20 | 20.5 |
| 3 | 17.7 | 17.2 | 19.4 | 20 |
| 4 | 15.1 | 16.5 | 18.8 | 20 |

This data set represents hourly temperature taken over a four-day period at a location. We are interested in determining the relationship between time and temperature and whether there is a significant difference between the average temperature on Day 1 and Day 2. Second is there a significant difference between the average temperature at hour one and hour 4. Run a T-test to find out.

What is the definition of a P-value?

For extra practice try make a bar graph. Include all of the appropriate elements.

|  |  |  |  |
| --- | --- | --- | --- |
| Students | Test 1 | Test 2 | Test 3 |
| John | 76 | 82 | 85 |
| Joe | 88 | 81 | 65 |
| Amy | 54 | 67 | 80 |
| Lisa | 93 | 89 | 72 |
| Dan | 81 | 65 | 73 |

Run a Chi-Square analysis on the following Data set.

|  |  |  |
| --- | --- | --- |
| Category | Observed | Expected |
| Aries | 29 |  |
| Taurus | 24 |  |
| Gemini | 22 |  |
| Cancer | 19 |  |
| Leo | 21 |  |
| Virgo | 18 |  |
| Libra | 19 |  |
| Scorpio | 20 |  |
| Saggitarius | 23 |  |
| Capricorn | 18 |  |
| Aquarius | 20 |  |
| Pisces | 23 |  |

Create a graph with two Y axes that best represents the Data in the table below

|  |  |  |  |
| --- | --- | --- | --- |
| Order Date | Items | Unit | Unit Cost |
| 2013 | Taq Polymerase | 23 | $123.50 |
| 2014 | Taq Polymerase | 72 | $150.50 |
| 2015 | Taq Polymerase | 56 | $140.50 |
| 2016 | Taq Polymerase | 97 | $100.50 |
| 2017 | Taq Polymerase | 29 | $100 |
| 2018 | Taq Polymerase | 38 | $100 |