**Finding Average**

|  |  |
| --- | --- |
| Student 1 | 23 |
| Student 2 | 33 |
| Student 3 | 45 |
| Student 4 | 25 |
| Student 5 | 23 |

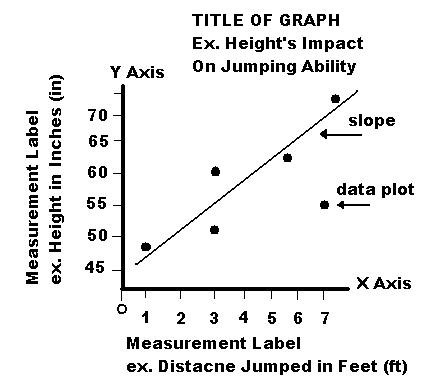
* + 1. Add up total data = 149
    2. Divide by number of subjects/ students = 5 (ex. 100/5=20)
    3. 149/5= 29.8 average

**Finding Percentage**

|  |  |
| --- | --- |
| Student 1 | 23 |
| Student 2 | 33 |
| Student 3 | 45 |
| Student 4 | 25 |
| Student 5 | 23 |

1. Add up the number of like amounts (23, 23 = 2 like amounts)
2. Add up the total number of subjects = 5
3. Divide total number of like amounts by total number of subjects
4. 2/5= 0.4
5. Move decimal two places to the left 0.40
6. 40% of the students scored a 23

**Graphing Cause and Effect Variables**



When you are comparing two sets of data measurements against each other (i.e., two variables), a scatter plot graph is useful. For example if you are trying to find out if foot size (variable #1) determines how far you can jump (variable #2). Or if you are trying to determine if the density of a liquid (variable #1) determines how fast you can drink it (variable #2). However for this you would have to figure out the density of the liquids you are using.

**EXAMPLE (Creating an X & Y Scatter Plot Graph)**

**Hypothesis:** The bigger the head, the higher the I.Q.

Data Table

Head Size (inches) v. Intellectual Quotient (points)

|  |  |  |
| --- | --- | --- |
| Student | Head (in) | I.Q. (pts.) |
| Bob | 25 | 115 |
| Sam | 15 | 105 |
| Kyle | 25 | 120 |
| Jill | 20 | 110 |

Conclusion: As head size increases, so does I.Q.