Time Frame: 50 minutes

Subject Matter: Correlation Coefficients

TELL ME

Objective: TSWBAT compute the correlation coefficient between the two variables and classify analytically the relationships as either positive, negative, or zero.

Standards: DA – 3.6

 Materials: Stop watch, Markers, Calculators, and Data sheets

Presentation of Information:

The class will gather data on the following.

1. Weight
2. Height
3. Speed

Then find the correlation between (a) weight and speed and (b) height and speed.

Some students will be asked to be asked to be the subjects of the study. The information stated above will be gathered.

Test (4th Nine week)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: 6th Date: March 30, 2011

Correlation between Weight and Speed

Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subjects’ Name | Weight in Pounds(x) | Speed in yards per second(y) | xy | x2 | y2 |
| 1. Kadeem Ray
 | 132 | 6.2 |  |  |  |
| 1. Tavorus Simmons
 | 225 | 7.2 |  |  |  |
| 1. Terrence Thompson
 | 180 | 7.2 |  |  |  |
| 1. Rakeem Campbell
 | 171 | 7.8 |  |  |  |
| 1. Jordan Broddy
 | 215 | 5.8 |  |  |  |
| 1. Corey Hyatt
 | 215 | 6.8 |  |  |  |
| 1. Paul Perkins
 | 140 | 6.8 |  |  |  |

Correlation between Weight and Speed

Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subjects’ Name | Weight in Pounds(x) | Speed in yards per second(y) | xy | x2 | y2 |
| 1. Kadeem Ray
 | 132 | 7.1 |  |  |  |
| 1. Tavorus Simmons
 | 225 | 7.7 |  |  |  |
| 1. Rakeem Campbell
 | 171 | 7.9 |  |  |  |
| 1. Nicholas Short
 | 130 | 8.0 |  |  |  |
| 1. Joradn Brody
 | 215 | 6.9 |  |  |  |
| 1. Terrence Thompson
 | 180 | 8.0 |  |  |  |

Test (4th Nine week)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: 7th Date: March 30, 2011

Correlation between Weight and Speed

Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subjects’ Name | Weight in Pounds(x) | Speed in yards per second(y) | xy | x2 | y2 |
| 1. Kip Miller
 | 185 | 9.6 |  |  |  |
| 1. Shaquille McLaughlin
 | 190 | 9.3 |  |  |  |
| 1. Joneysha Newton
 | 141 | 7.8 |  |  |  |
| 1. Shakeel David
 | 180 | 8.8 |  |  |  |
| 1. Tache Jenkins
 | 120 | 8.2 |  |  |  |
| 1. Taykemia Young
 | 150 | 5.2 |  |  |  |

Correlation between Weight and Speed

Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subjects’ Name | Weight in Pounds(x) | Speed in yards per second(y) | xy | x2 | y2 |
| 1. Shaquille McLaughlin
 | 190 | 7.8 |  |  |  |
| 1. Taykemia Young
 | 150 | 5.5 |  |  |  |
| 1. Kilderick Gadson
 | 315 | 4.9 |  |  |  |
| 1. Shakeel David
 | 180 | 7.1 |  |  |  |
| 1. Kip Miller
 | 185 | 8.0 |  |  |  |