# **Mathematics 10** – Correlation Coefficient

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find a Summer Holiday Friend Activity

Read through the following list of summer holiday activities. Without consulting with any other students, please rank the activities from 1 to 10, with 1 meaning you’d like to do that activity the most, and 10 meaning you’d like to do that activity the least.

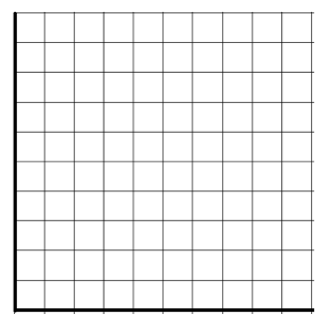
|  |  |  |  |
| --- | --- | --- | --- |
| My Rank  (x) | Activity | Friend’s Rank (y) | Ordered Pairs (x, y) |
|  | Go to the beach |  |  |
|  | Go to the fair |  |  |
|  | See a movie at the theatre |  |  |
|  | Go for a swim at the pool |  |  |
|  | Go camping |  |  |
|  | Go shopping at the mall |  |  |
|  | Read a book |  |  |
|  | Play organized sports (basketball/soccer/etc.) |  |  |
|  | Go to a music concert |  |  |
|  | Play video games |  |  |

1. Do you and your friend like similar activities?

2. What would you expect a graph to look like if two friends chose exactly the same ranks for activities?

3. What would you expect a graph to look like if two friends chose none of the same ranks for activities?

4. What would you expect a graph to look like if two friends chose about half of the same ranks for activities?

Number and label the axes, and plot the ordered pairs below.