Statistics – Minitab – and Love

Ho: All is lost, our love is not meant to be
Ha: Oh happy day, you really like me
Our favorite test statistic says p=0.053
That's a little high but it's good enough for me



|  |  |  |  |
| --- | --- | --- | --- |
| X | Y | X | Y |
| 5 | 225 | 15 | 476 |
| 15 | 475 | 10 | 345 |
| 5 | 226 | 9 | 320.5 |
| 5 | 227 | 8 | 296.5 |
| 5.2 | 233 | 7 | 272 |
| 5.5 | 241.5 | 6 | 248 |
| 6.3 | 262.2 | 5.2 | 229 |
| 7 | 280 | 11 | 370.5 |
| 8 | 305 | 12 | 396.5 |
| 9 | 329.3 | 13 | 422 |
| 10 | 353.7 | 14 | 448 |
| 11 | 379.3 | 14.7 | 466.5 |
| 12 | 405 | 15 | 477 |
| 13 | 430 | 14.8 | 473 |
| 13.8 | 449.7 | 14.5 | 466.5 |

Directions:

1. Open Minitab.

2. Open Word. Put your name

 and block in the header.

3. Enter the data into Minitab.

4. Create a scatterplot and copy

 to Word.

5. Find the LSRL. Copy the analysis

 to Word.

6. Interpret r and r2.

7. Create a residual plot and copy

 to Word.

8. Is a linear fit appropriate for this

 data? X = months in a relationship

 Y = kisses exchanged