A researcher decided to examine the relationship between the number of churches in a town and the number of bars to see if churches influence the number of bars opened. Given the following data 1) create a scatter plot, 2) find *r*, and 3) use the five hypothesis testing steps to determine if that correlation is significant at the .05 significance level.

Bars Churches

City 1 83 151

City 2 572 2598

City 3 22 120

City 4 28 291

City 5 38 341

City 6 250 2402

City 7 22 148

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| Assumptions: |
| Step 1/2: |
| Step 3: |
| Step 4: |
| Step 5: |
| Step 6: |