\*\*All work shown (step by step), in simple terms please!!!

No excel, just formulas\*\*.

20) A marketing research firm wished to study the relationship between wine consumption and whether a person likes to watch professional tennis on television. One hundred randomly selected people are asked whether they drink wine and whether they watch tennis. The following results are obtained:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Watch Tennis | Do Not Watch Tennis | Totals |
| Drink Wine | 16 | 24 | 40 |
| Do Not Drink Wine | 4 | 56 | 60 |
| Totals | 20 | 80 | 100 |

Test the hypothesis that whether people drink wine is independent of whether people watch tennis. Set α = 0.05

1. Is the  value significant at 5% level of significant?
2. Write the conclusion for this question