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

No excel, just formulas\*\*.

3) Fill in the missing values in following ANOVA table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Source** | **df** | **SS** | **MS** | **F** |
| Factor |  | 346.2 | 115.4 | 20.79 |
| **Error** | 16 |  |  |  |
| **Total** |  |  |  |  |

|  |  |
| --- | --- |
|  | Answer |
| a. In the above ANOVA table, is the factor significant at 5% level of significant? |  |

4) A regression model relating x, number of sales persons at a branch office, to y, annual sales at the office ($1000s), has been developed. The computer output from a regression analysis of the data follows.

 The regression equation is

  *= 80.0 + 50.0X*

 Predictor Coef Stdev t-ratio

 Constant 80.0 11.333 7.06

 X 50.0 5.482 9.12

 Analysis of Variance

 SOURCE DF SS MS

 Regression 1 6828.6 6828.6

 Error 28 2298.8 82.1

 Total 29 9127.4

 a. Write the estimated regression equation

 b. How many branch offices were involved in the study?

 c. Compute the F statistic and test the significance of the relationship at a .05 level of significance.

 d. Predict the annual sales at the Memphis branch office. This branch has 12 sales persons.