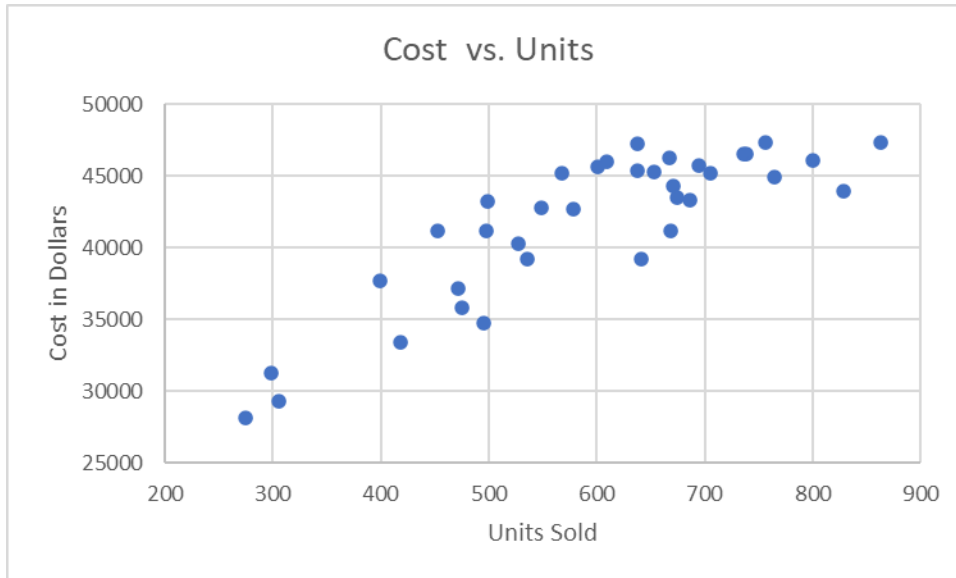


**Instructions:** Show all work. Answers without work can only be graded all or nothing. Partial credit is available only when work is shown. Answer all parts of each problem. Provide explanations as indicated. You may use Excel to complete any required statistical calculations or graphs. Submit any Excel work with assignment. Do not say “see Excel” for answers, but write or paste them into this document. Exact answers are preferred unless specifically asked to round.

1. Create a scatterplot of the data in the file **245quiz12data.xlsx** with Units as x and Cost as y.



2. Does there appear to be a weak, moderate or strong correlation between the points?

**Moderately strong to strong**

3. Find the correlation value and the coefficient of determination.

**Correlation is around 0.85, the  $R^2$  is around 0.74**

4. Does the correlation value support your answer in #2? Explain.

**Yes, the correlation is greater than 0.7.**

5. Interpret the coefficient of determination value.

**About 74% of the variability in Cost can be explained by the number of units sold.**