|  |
| --- |
|  |
| T(oC) | VP(Torr) | T( K) | 1/T(K) |  | lnVP |
| -78.1 | 0.007501 | 194.9 | 0.005130836 |  | -4.892718934 |
| -57.1 | 0.075006 | 215.9 | 0.004631774 |  | -2.590187169 |
| -31.3 | 0.750062 | 241.7 | 0.00413736 |  | -0.287599409 |
| 1.5 | 7.500617 | 274.5 | 0.003642987 |  | 2.014985284 |
| 45.2 | 75.00617 | 318.2 | 0.003142678 |  | 4.317570377 |

Graphing with Excel Questions: Post Lab and Analysis

1. Consider Graphs (A) and (B)

a)Did you find a trendline that fit the data in each case?

From such equations, it is not likely to find a striahg line, since Vapor Pressure and Temperture are most likely modeled as follows:

ln(P) = X\*(1/T)

b) Which trendline was a better fit, the linear or the exponential?

exponential should be a better fit for a raw V vs. T line

c) What was the equation for the best fitting trendline for each graph?

Clearly the exponential line has a better fit, since the R^2 value is much more near to 1

Equation for Graph A (linear):

Equation for Graph B (linear):

1. Consider Graph (C)
2. Did you obtain a linear relationship for the data plotted?

yes

1. What was the equation of the best fitting trendline?

y = -4643.3x + 18.91