Curve fitting – lab report

1. Set up the formula that expresses how the quantity in the second row of the table depends on the quantity in the first row of the table: $y = F(x,par)$
2. The expression is nonlinear. Use SciDavis to plot your data, then type in the appropriate formula and fit the curve. Read the value of the unknown parameter.
3. Transform your expression to a linear form: a function of the second variable of the table should be a linear function of the first variable of the table: $G(y) = a \cdot x$
4. Derive the formula for calculating the slope for the line $y = ax$ (i.e. when the intercept is zero) using the least squares method.
5. Using the above formula calculate the slope of the line $G(y) = ax$.
6. From the slope calculate again the value of the unknown parameter. Compare it with the one determined with SciDavis.