1. Kleiber

(Data from <http://faculty.bard.edu/belk/math314/KleiberPaper.pdf>) 

* 1. Use the data in [KleiberData.xls](http://www1.lasalle.edu/~blum/c152wks/KleiberData.xls) to make an XY-Scatter Graph and fit it to a power law.
  2. Repeat the exercise in R.

(0.021, 0.282, 0.41, 2.98, 1.52, 2.46, 3.57, 4.33, 5.33, 3, 4.2, 6.6, 14.1, 24.8, 23.6, 36, 38, 46.4, 46.8, 57.2, 54.8, 57.9, 300, 435, 482, 600)  
  
(3.6, 28.1, 35.1, 167, 83, 119, 164, 191, 233, 152, 207, 288, 534, 875, 872, 800, 1090, 1254, 1330, 1368, 1224, 1320, 4221, 8166, 7754, 7877)

* 1. Repeat the exercise in Mathematica

{{0.021, 3.6},{0.282, 28.1},{0.41, 35.1},{2.98, 167},{1.52, 83},{2.46, 119},{3.57, 164},{4.33, 191},{5.33, 233},{3, 152},{4.2, 207},{6.6, 288},{14.1, 534},{24.8, 875},{23.6, 872},{36, 800},{38, 1090},{46.4, 1254},{46.8, 1330},{57.2, 1368},{54.8, 1224},{57.9, 1320},{300, 4221},{435, 8166},{482, 7754},{600, 7877}}

1. Have Mathematica read the data from the web

http://www1.lasalle.edu/~blum/c152wks/Resistor.csv

and fit the data to a straight line

1. BMI VLOOKUP. Using the height and weight data found in the BMI\_VLOOKUP.xlsx file
   1. Calculate the height in all inches,
   2. Calculate the height in meters,
   3. Calculate the weight in kilograms
   4. Calculate the BMI (weight in kilograms)/(height in meters)^2
   5. Create and use a VLOOKUP table to categorize the data based on the following ranges

|  |  |
| --- | --- |
| **Category** | **Range** |
| Severely obese | >35 |
| Obese | 30-35 |
| Overweight | 25-30 |
| Normal | 18.5-25 |
| Underweight | 16-18.5 |
| Severely underweight | <16 |