Free University of Bolzano Bozen – School of Economics and Management

Information Systems and Data Management 5 exam

# Rules

* + No communication with other people or among students is allowed. Phones and every other means of communication must be turned off. Opening any communication program on the computer is not allowed and is considered cheating.
  + You are responsible for the correct copy of your files.

Enter Windows with your login. You have 45 minutes starting from now.

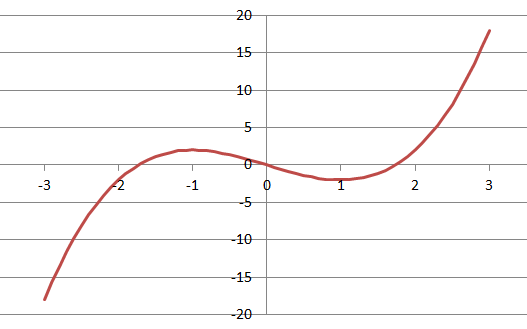
Copy all the files in **\\ubz01fst\courses\exam\_coletti\YOURNAME** on your Desktop. At the end of each exercise copy here only the files you are required to return, overwriting the original files you have modified.

# Exercise Excel

Open file **medicines.xlsx** with Microsoft Excel 2010 and insheet **List**:

* Insert a new column A with title ID containing even (pari, gerade) numbers, starting from 2 and going up to 9072 (i.e. 2, 4, 6, …);
* in column J insert integer random numbers between 5 and 37. Copy these numbers, copying only the values and not the formulas, to column K;
* in column L insert “high price” for medicines with price in April or price in December larger than 10, nothing otherwise;
* save file **medicines.xlsx**;
* change Excel decimal separator to dot and export this sheet to tab-delimited file **medicines.txt**;
* close the file and reopen **medicines.xlsx**.

In a new sheet called **mortgage** with yellow tab build the payments’ table for a mortgage loan for 15 years of 200 000 € with a rate of 4% and constant payments. Supposing that after the first 5 years the rate increases to 8%, determine the new amount to pay for the remaining 10 years.



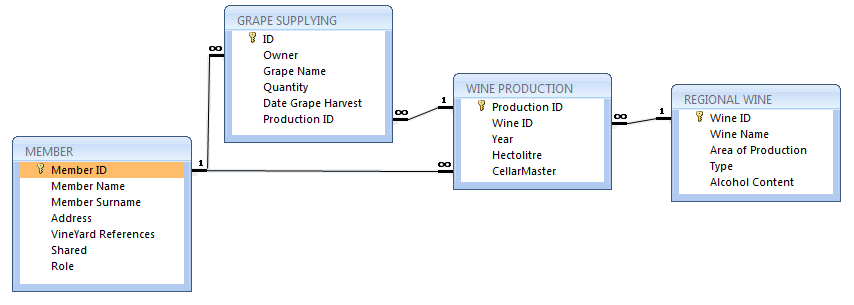
In a new sheet build the mathematical graph of , for between and , with red line and without markers.

Use sheet **food**. Find a minimum-cost diet that contains at least 500 calories, at least 6 grams of chocolate, at least 10 grams of sugar and at least 8 grams of fat, paying attention that eaten quantities must obviously be non-negative and that Cola must be integer.

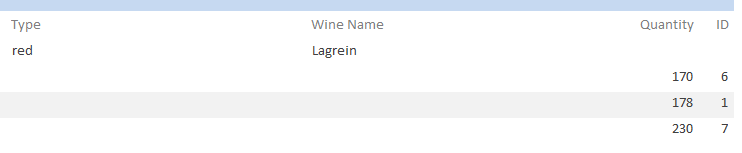
Return file **medicines.xlsx** and **medicines.tab**.

## Exercise Access

Open database **Winery.accdb** and



* insert in table Wine Production a validation rule with appropriate validation text restricting hectoliters be positive or zero;
* create query **exam1** that shows for each regional wine produced in “Termeno” area (fields: Wine ID, Wine Name) the number of grape supplied;
* create report **exam2** showing the fields displayed in the picture, wine by wine sorted by quantity, considering only “red” wines with supplied quantity between 100 and 700.



Return **Winery.accdb**