

For each set of data do the following:

- Make a scatter plot using technology. On the back of this paper sketch the scatter plot and label the axes. Sketch what you see on the calculator screen or whatever screen you are using.
- Find the Linear Regression equation.
- Use the equation to answer the given questions.
- Round all decimals to the nearest hundredth where necessary.

## 1. Women's Shoe Sizes

US Size	European Size
1	31
3	34
5	36
7	39
9	41
11	44

EQ:

a) What US Size corresponds to a European size of 55?

b) What European size corresponds to a US size of 13

## 2. Avg. daily energy requirements for males

Age (yrs)	Energy Requirement (calories)
1	1100
2	1300
5	1800
8	2200
11	2500
14	2800

EQ:

a) How old is a boy if he requires 3200 calories

b) How many calories is needed for a 20 year old?

## 3. Relationship between Population (millions) and number of Licensed Drivers (millions) for various states.

X Population(millions)	2.7	12.6	2.7	6.4	12.3	21.7
Y Licensed Drivers (millions)	2.0	8.0	1.9	4.7	8.3	13.2

EQ:

a) Find the population for a state if there are 6.4 (million) licensed drivers.

b) Find the number of licensed drivers if the population is 35 (million).