Regression and Correlation in MS Excel – Practice

Example 1:

Find out whether a correlation between glucose level in blood serum and keto-substances in urine exists in dairy cows. In an experiment following values were measured:

Glucose level (mmol/l):	Keto-Substances (units)
2.5	0
2.6	0
2.8	2
2.9	1
3.0	2
3.1	3
3.2	2
3.5	4
3.9	2
4.2	4

Calculate basic statistical parameters (AVG, SD) in each sample, calculate correlation coefficient and figure a chart of linear regression (with trendline equation) of the relation between these sample data.

Example 2:

Find out whether a correlation between acidobasic exudation (ABE) and pH of urine exists in dairy cows. In an experiment following values were measured:

Urine ABE (mmol/l)	pH
20	7.0
10	7.2
50	8.0
90	7.6
135	7.9
150	8.3
173	8.0
195	8.1
205	8.6
229	8.1

Calculate basic statistical parameters (AVG, SD) in each sample, calculate correlation coefficient and figure a chart of linear regression (with tredline equation) of the relation between these sample data.