# Tutorial topic 8, Simple and Multiple linear regression

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## Objectives

- Review calculating (i) ANOVA table of a simple linear regression model (ii) the correlation coefficient;
- Learn to interpret correlation matrix to identify useful predictor variables;
- Learn to calculate regression parameters for a multiple linear regression model.

### EXERCISE 1 – REVIEW: FITTING REGRESSION PARAMETERS & ASSESSING SIGNIFICANCE OF A SIMPLE LINEAR REGRESSION MODEL

The number of horses on Canadian farms appeared to decrease after the war:

| Year | 1944 | 1945 | 1946 | 1947 | 1948 |
|---|---|---|---|---|---|
| **horses.100.000** | 28 | 26 | 22 | 20 | 19 |