

3. For each of the sets of variables in Previous exercise 2:

(a) Classify each variable as either quantitative or qualitative

(b) Which type of regression (see Table 1.5) can be used in the analysis of the data?

**Table 1.15** Various Classifications of Regression Analysis

Type of Regression	Conditions
Univariate	Only one quantitative response variable
Multivariate	Two or more quantitative response variables
Simple	Only one predictor variable
Multiple	Two or more predictor variables
Linear	All parameters enter the equation linearly, possibly after transformation of the data
Nonlinear	The relationship between the response and some of the predictors is nonlinear or some of the parameters appear nonlinearly, but no transformation is possible to make the parameters appear linearly
Analysis of variance	All predictors are qualitative variables
Analysis of covariance	Some predictors are quantitative variables and others are qualitative variables
Logistic	The response variable is qualitative