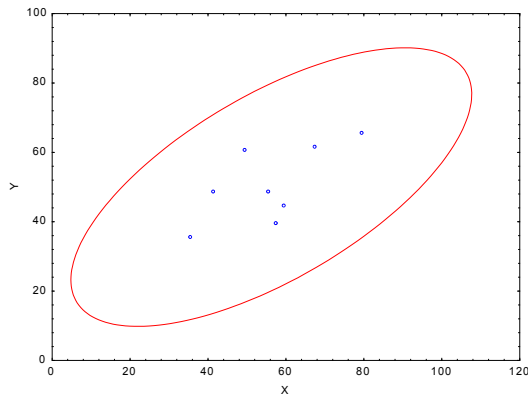
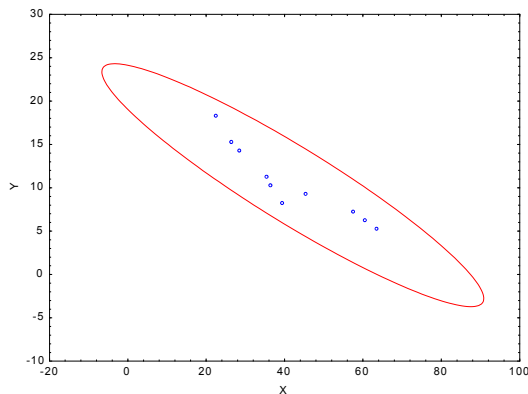


11 seminar - suplement

ad 11.7



ad 11.13



Problem 5.:

Data of 65 employees were processed and realizations of following variables are recorded in contingency table:

X denotes the years of practical experiences and Y denotes efficiency bonus in Kč.

x	y						
	1250	1750	2250	2750	3250	3750	4250
12,5	5	3	0	0	0	0	0
17,5	2	4	4	0	0	0	0
22,5	0	1	6	7	4	0	0
27,5	0	0	1	3	7	1	0
32,5	0	0	0	1	10	5	1

Calculate the realization of the sample correlation coefficient R_{12} and interpret its value.

To save time, following sums are available:

$$\sum_{j=1}^5 x_{[j]} = 562,5, \sum_{k=1}^7 y_{[k]} = 72750, \sum_{j=1}^5 x_{[j]}^2 = 40456, \sum_{k=1}^7 y_{[k]}^2 = 198562500,$$

$$\sum_{j=1}^5 \sum_{k=1}^7 n_{jk} x_{[j]} y_{[k]} = 4446875$$