

1. Supplier of furniture has promised that chairs he is sending will contain 80% of the 1st quality product. The control has revealed that there are 100 products of which 75 is the 1st quality, 10 is of the 2nd quality, and 15 is of the 3rd quality.

Test at the level of significance 0,05 if the supplier has fulfilled his promises.

ts, 15% 2nd quality products and 5% 3rd quality products.  
ity and 15 is of the 3rd quality products.

2. Medical study gives data of occurrence of bronchitis at the group of smokers and non-smokers, (ta

	Smokers	Non-smokers
Bronchitis	160	210
No bronchitis	190	450

Test the independence of bronchitis on the smoking of patients, take level of significance 0,05.

ble).

3. Test independence of 4 methods  
(M1, M2, M3, M4). On results on 5-degree scale.  
Test using level of significance 0,05.

Method Result	M1	M2	M3	M4
1	7	5	13	8
2	16	25	14	9
3	10	10	16	11
4	11	16	9	12
5	7	8	9	6

## Test dobré shody.

### Test

1.

$$H_1: \bar{x}, p \neq \pi$$

(negace  $H_0$ )

2. Test criterion

$$G = \sum_{i=1}^k \frac{(n_i - \psi_i)^2}{\psi_i}$$

3. Admission interval:

$$\langle 0, \chi^2_{1-\alpha}(k) \rangle$$

critical interval:

$$\langle \chi^2_{1-\alpha}(k), +\infty \rangle$$

4. Result

Frequencies  $n_1, n_2, \dots, n_k$

Theoretical frequencies  $\psi_1, \psi_2, \dots, \psi_k$

$$\psi_i = p_i \cdot n$$

=CHITEST(Aktuální; Očekávané)