STATISTICS 2
WS 2017 (Mag. Thomas Forstner)

Course-Number: 366.554

21) In a sample of 21 patients with flu the medicament ANTIFLU cures 18 patients. The expected cure rate is 60%. Is this a statistical significant difference (type I error of 5%)?

22) You want to compare the quality of two different independent assembly lines. A sample of 100 respectively 200 components was taken from each assembly line and examined. The results are presented in the table below.

Construct a suitable statistical test with a type I error of 5% to verify if there is a difference between the two assembly lines.

	assembly line A [frequency]	assembly line B [frequency]
no defect	70	150
chip	7	20
bad soldering joint	13	20
bad circuit board	10	10
Total	*100*	*200*

23) In a small company, the numbers of promotions in the past year are examined for a possible association between gender and promotion. The hypothesis of association between gender and promotion should be tested (type I error of 5%).

The records show the following:

		Promotion	
		Yes	No
Gender	Male	5	2
	Female	1	6

Compare the results of the Chi square test, the Chi square test with Yates Correction and the Fisher's Exact test.