

# Calculating X<sup>2</sup>

## Goodness-of-fit test

*Are the 3 groups independent of each other?*

$$\chi^2 =$$

$$E_{ij} =$$

	Group1	Group2	Group3	T <sub>row</sub>
Observed	50	10	30	

$$\chi^2 =$$

## Contingency test

*Is Variable A independent of Variable B?*

$$\chi^2 =$$

$$E_{ij} =$$

	VarA1	VarA2	VarA3	T <sub>row</sub>
VarB1	15	5	20	
VarB2	35	5	10	
T <sub>column</sub>				

$$\chi^2 =$$