

29

 $H_0$ : нет разницы в расходах $H_1$ :  $\neq$ 

	2	3	4	5	
I	33	43	80	144	300

II	79	35	72	154	300
	72	78	152	298	

$$D_1 = \frac{(33 - \frac{72}{600} \cdot 300)^2}{\frac{72}{600} \cdot 300} + \frac{(43 - \frac{78}{600} \cdot 300)^2}{\frac{78}{600} \cdot 300} = 1.0385$$

$$D_2 = \frac{(79 - \frac{72}{600} \cdot 300)^2}{\frac{72}{600} \cdot 300} + \frac{(35 - \frac{78}{600} \cdot 300)^2}{\frac{78}{600} \cdot 300} + \frac{(72 - \frac{152}{600} \cdot 300)^2}{\frac{152}{600} \cdot 300} + \frac{(154 - \frac{298}{600} \cdot 300)^2}{\frac{298}{600} \cdot 300} = 1.0365$$

$$\hat{D} = D_1 + D_2 = 2.0721$$

$$\Delta \rightarrow \chi^2(1.3) = \chi^2(3)$$

$$p\text{-value} = \int_{2.0721}^{+\infty} q(t) dt = \int_{2.0721}^{+\infty} \frac{\sqrt{t} e^{-\frac{t}{2}}}{\sqrt{2\pi}} dt = 0.56 \Rightarrow$$

$\Rightarrow p\text{-value} > 0.05 \Rightarrow$  не отвергаем  $H_0$