

## Проверка гипотезы однородности выборок по Вилкоксоу

При уровне значимости  $\alpha$  проверить гипотезу об однородности двух выборок<sup>1</sup>

### Задача L-48.1.

2

$x_i = 3, 4, 5, 6, 8, 9$   
 $y_i = 1, 2, 7, 10, 11, 12, 13, 14$   
 $Q = \alpha/2 = 0.005$

### Задача L-48.2.

2

$x_i = 4, 6, 8, 9, 10, 11$   
 $y_i = 5, 7, 12, 13, 14, 15, 16,$   
 $Q = \alpha/2 = 0.005$

### Задача L-48.3.

2

$x_i = 8, 12, 20, 24, 28, 36$   
 $y_i = 4, 16, 32, 40, 44, 48, 52,$   
 $Q = \alpha/2 = 0.005$

### Задача L-48.4.

2

$x_i = 6, 10, 18, 22, 26, 34$   
 $y_i = 2, 14, 30, 38, 42, 46, 50, 54$   
 $Q = \alpha/2 = 0.025$

### Задача L-48.5.

2

$x_i = 2, 4, 6, 7, 9, 10$   
 $y_i = 1, 3, 5, 8, 11, 12, 13, 14$   
 $Q = \alpha/2 = 0.010$

### Задача L-48.6.

2

$x_i = 2, 3, 4, 5, 7, 8$   
 $y_i = 1, 6, 9, 10, 11, 12, 13, 14$   
 $Q = \alpha/2 = 0.010$

### Задача L-48.7.

2

$x_i = 10, 13, 19, 25, 31, 34$   
 $y_i = 4, 7, 16, 22, 28, 37, 40, 43$   
 $Q = \alpha/2 = 0.005$

### Задача L-48.8.

2

$x_i = 7, 13, 19, 25, 31, 34$   
 $y_i = 4, 10, 16, 22, 28, 37, 40, 43$   
 $Q = \alpha/2 = 0.010$

### Задача L-48.9.

2

$x_i = 7, 13, 16, 19, 22, 25$   
 $y_i = 4, 10, 28, 31, 34, 37, 40,$   
 $Q = \alpha/2 = 0.010$

### Задача L-48.10.

2

$x_i = 10, 16, 19, 25, 31, 34$   
 $y_i = 4, 7, 13, 22, 28, 37, 40, 43$   
 $Q = \alpha/2 = 0.005$

### Задача L-48.11.

2

$x_i = 2, 5, 11, 17, 23, 26$   
 $y_i = 8, 14, 20, 29, 32, 35, 38,$   
 $Q = \alpha/2 = 0.050$

### Задача L-48.12.

2

$x_i = 3, 5, 6, 7, 9, 11$   
 $y_i = 4, 8, 10, 12, 13, 14, 15,$   
 $Q = \alpha/2 = 0.010$

### Задача L-48.13.

2

$x_i = 4, 6, 8, 9, 10, 11$   
 $y_i = 3, 5, 7, 12, 13, 14, 15,$   
 $Q = \alpha/2 = 0.050$

### Задача L-48.14.

2

$x_i = 4, 8, 16, 20, 28, 32$   
 $y_i = 12, 24, 36, 40, 44, 48, 52,$   
 $Q = \alpha/2 = 0.010$

<sup>1</sup>Гмурман В.Е. Руководство к решению задач по теории вероятностей и математической статистике. М.:1969. с. 248.

**Задача L-48.15.**

2

$$x_i = 7, 15, 23, 31, 35, 39$$

$$y_i = 3, 11, 19, 27, 43, 47, 51, 55$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.16.**

2

$$x_i = 1, 7, 13, 19, 22, 25$$

$$y_i = 4, 10, 16, 28, 31, 34, 37,$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.17.**

2

$$x_i = 4, 7, 13, 16, 22, 28$$

$$y_i = 10, 19, 25, 31, 34, 37, 40,$$

$$Q = \alpha/2 = 0.010$$

**Задача L-48.18.**

2

$$x_i = 5, 9, 13, 17, 19, 21$$

$$y_i = 3, 7, 11, 15, 23, 25, 27, 29$$

$$Q = \alpha/2 = 0.050$$

**Задача L-48.19.**

2

$$x_i = 1, 5, 13, 17, 21, 29$$

$$y_i = 9, 25, 33, 37, 41, 45, 49,$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.20.**

2

$$x_i = 3, 4, 5, 6, 7, 9$$

$$y_i = 2, 8, 10, 11, 12, 13, 14, 15$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.21.**

2

$$x_i = 8, 12, 14, 16, 20, 22$$

$$y_i = 4, 6, 10, 18, 24, 26, 28, 30$$

$$Q = \alpha/2 = 0.010$$

**Задача L-48.22.**

2

$$x_i = 4, 7, 10, 16, 22, 25$$

$$y_i = 1, 13, 19, 28, 31, 34, 37,$$

$$Q = \alpha/2 = 0.025$$

**Задача L-48.23.**

2

$$x_i = 5, 7, 11, 15, 19, 21$$

$$y_i = 3, 9, 13, 17, 23, 25, 27,$$

$$Q = \alpha/2 = 0.050$$

**Задача L-48.24.**

2

$$x_i = 2, 4, 5, 6, 7, 8$$

$$y_i = 1, 3, 9, 10, 11, 12, 13, 14$$

$$Q = \alpha/2 = 0.050$$

**Задача L-48.25.**

2

$$x_i = 6, 10, 14, 22, 30, 34$$

$$y_i = 2, 18, 26, 38, 42, 46, 50, 54$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.26.**

2

$$x_i = 4, 6, 8, 10, 12, 16$$

$$y_i = 2, 14, 18, 20, 22, 24, 26, 28$$

$$Q = \alpha/2 = 0.050$$

**Задача L-48.27.**

2

$$x_i = 10, 13, 16, 22, 28, 31$$

$$y_i = 4, 7, 19, 25, 34, 37, 40, 43$$

$$Q = \alpha/2 = 0.010$$

**Задача L-48.28.**

2

$$x_i = 4, 7, 13, 19, 22, 25$$

$$y_i = 1, 10, 16, 28, 31, 34, 37,$$

$$Q = \alpha/2 = 0.005$$

**Задача L-48.29.**

2

$$x_i = 2, 6, 10, 18, 26, 30$$

$$y_i = 14, 22, 34, 38, 42, 46, 50,$$

$$Q = \alpha/2 = 0.050$$

**Задача L-48.30.**

2

$$x_i = 12, 16, 20, 24, 32, 36$$

$$y_i = 4, 8, 28, 40, 44, 48, 52, 56$$

$$Q = \alpha/2 = 0.005$$

## Проверка гипотезы однородности выборок по Вилкоксо- ну

30-Nov-19

№	$W_{\text{набл}}$	$W_{\text{ниж}}$	$W_{\text{верх}}$	Порядк.ном.	
1	35	25	65	3,4,5,6,8,9,	homogeneous
2	30	24	60	1,3,5,6,7,8,	homogeneous
3	32	24	60	2,3,5,6,7,9,	homogeneous
4	32	29	61	2,3,5,6,7,9,	homogeneous
5	38	27	63	2,4,6,7,9,10,	homogeneous
6	29	27	63	2,3,4,5,7,8,	homogeneous
7	42	25	65	3,4,6,8,10,11,	homogeneous
8	41	27	63	2,4,6,8,10,11,	homogeneous
9	32	25	59	2,4,5,6,7,8,	homogeneous
10	43	25	65	3,5,6,8,10,11,	homogeneous
11	30	30	54	1,2,4,6,8,9,	
12	29	25	59	1,3,4,5,7,9,	homogeneous
13	36	30	54	2,4,6,7,8,9,	homogeneous
14	27	25	59	1,2,4,5,7,8,	homogeneous
15	39	25	65	2,4,6,8,9,10,	homogeneous
16	33	24	60	1,3,5,7,8,9,	homogeneous
17	28	25	59	1,2,4,5,7,9,	homogeneous
18	39	31	59	2,4,6,8,9,10,	homogeneous
19	26	24	60	1,2,4,5,6,8,	homogeneous
20	28	25	65	2,3,4,5,6,8,	homogeneous
21	40	27	63	3,5,6,7,9,10,	homogeneous
22	32	27	57	2,3,4,6,8,9,	homogeneous
23	36	30	54	2,3,5,7,9,10,	homogeneous
24	32	31	59	2,4,5,6,7,8,	homogeneous
25	32	25	65	2,3,4,6,8,9,	homogeneous
26	28	31	59	2,3,4,5,6,8,	
27	38	27	63	3,4,5,7,9,10,	homogeneous
28	34	24	60	2,3,5,7,8,9,	homogeneous
29	26	30	54	1,2,3,5,7,8,	
30	35	25	65	3,4,5,6,8,9,	homogeneous

L-48 файл 48L2-AnsA