Проверка гипотезы однородности выборок по Вилкоксону

При уровне значимости α проверить гипотезу об однородностидвух выборок[1]

Задача L-48.1. 1
$x_i = 5, 7, 9, 11, 13, 14$
$y_i = 4, 6, 8, 10, 12, 15, 16,$
$Q = \alpha/2 = 0.005$

Задача L-48.2. 1
$x_i = 12, 20, 28, 32, 36, 40$
$y_i = 4, 8, 16, 24, 44, 48, 52, 56$
$Q = \alpha/2 = 0.010$

Задача L-48.3. 1
$x_i = 3, 5, 9, 13, 15, 17$
$y_i = 1, 7, 11, 19, 21, 23, 25,$
$Q = \alpha/2 = 0.025$

Задача L-48.4. 1
$x_i = 8, 14, 17, 23, 29, 32$
$y_i = 2, 5, 11, 20, 26, 35, 38, 41$
$Q = \alpha/2 = 0.050$

Задача L-48.5. 1
$x_i = 5, 6, 7, 9, 11, 12$
$y_i = 4, 8, 10, 13, 14, 15, 16, 17$
$Q = \alpha/2 = 0.005$

Задача L-48.6. 1
$x_i = 4, 10, 13, 19, 25, 28$
$y_i = 1, 7, 16, 22, 31, 34, 37,$
$Q = \alpha/2 = 0.005$

Задача L-48.7. 1
$x_i = 5, 11, 14, 20, 26, 29$
$y_i = 2, 8, 17, 23, 32, 35, 38, 41$
$Q = \alpha/2 = 0.005$

Задача L-48.8. 1
$x_i = 4, 7, 10, 13, 16, 22$
$y_i = 1, 19, 25, 28, 31, 34, 37, 40$
$Q = \alpha/2 = 0.025$

Задача L-48.9. 1
$x_i = 5, 9, 13, 15, 17, 19$
$y_i = 1, 3, 7, 11, 21, 23, 25, 27$
$Q = \alpha/2 = 0.010$

Задача L-48.10. 1
$x_i = 5, 7, 9, 11, 12, 13$
$y_i = 4, 6, 8, 10, 14, 15, 16, 17$
$Q = \alpha/2 = 0.050$

Задача L-48.11. 1
$x_i = 7, 10, 13, 19, 25, 28$
$y_i = 1, 4, 16, 22, 31, 34, 37, 40$
$Q = \alpha/2 = 0.010$

Задача L-48.12. 1
$x_i = 6, 10, 14, 18, 26, 30$
$y_i = 2, 22, 34, 38, 42, 46, 50, 54$
$Q = \alpha/2 = 0.005$

Задача L-48.13. 1
$x_i = 9, 13, 21, 25, 29, 33$
$y_i = 1, 5, 17, 37, 41, 45, 49, 53$
$Q = \alpha/2 = 0.050$

Задача L-48.14. 1
$x_i = 9, 12, 15, 18, 21, 27$
$y_i = 3, 6, 24, 30, 33, 36, 39, 42$
$Q = \alpha/2 = 0.050$

[1] Гмурман В.Е. Руководство к решению задач по теории вероятностей и математической статистике. М.:1969. с. 248.

Задача L-48.15. 1

$x_i = 5, 7, 8, 9, 11, 12$
$y_i = 4, 6, 10, 13, 14, 15, 16,$
$Q = \alpha/2 = 0.025$

Задача L-48.16. 1

$x_i = 3, 4, 6, 8, 10, 11$
$y_i = 2, 5, 7, 9, 12, 13, 14,$
$Q = \alpha/2 = 0.025$

Задача L-48.17. 1

$x_i = 3, 5, 7, 9, 11, 15$
$y_i = 1, 13, 17, 19, 21, 23, 25,$
$Q = \alpha/2 = 0.005$

Задача L-48.18. 1

$x_i = 3, 7, 15, 23, 27, 35$
$y_i = 11, 19, 31, 39, 43, 47, 51,$
$Q = \alpha/2 = 0.025$

Задача L-48.19. 1

$x_i = 5, 13, 17, 25, 33, 37$
$y_i = 1, 9, 21, 29, 41, 45, 49,$
$Q = \alpha/2 = 0.025$

Задача L-48.20. 1

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

Задача L-48.21. 1

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

Задача L-48.22. 1

$x_i = 12, 20, 24, 32, 36, 40$
$y_i = 4, 8, 16, 28, 44, 48, 52, 56$
$Q = \alpha/2 = 0.010$

Задача L-48.23. 1

$x_i = 6, 14, 18, 22, 30, 34$
$y_i = 2, 10, 26, 38, 42, 46, 50, 54$
$Q = \alpha/2 = 0.005$

Задача L-48.24. 1

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

Задача L-48.25. 1

$x_i = 1, 7, 13, 16, 22, 25$
$y_i = 4, 10, 19, 28, 31, 34, 37,$
$Q = \alpha/2 = 0.005$

Задача L-48.26. 1

$x_i = 6, 8, 10, 11, 12, 13$
$y_i = 4, 5, 7, 9, 14, 15, 16, 17$
$Q = \alpha/2 = 0.010$

Задача L-48.27. 1

$x_i = 6, 8, 10, 12, 13, 14$
$y_i = 4, 5, 7, 9, 11, 15, 16, 17$
$Q = \alpha/2 = 0.010$

Задача L-48.28. 1

$x_i = 4, 10, 16, 19, 22, 25$
$y_i = 1, 7, 13, 28, 31, 34, 37, 40$
$Q = \alpha/2 = 0.025$

Задача L-48.29. 1

$x_i = 5, 7, 11, 13, 15, 17$
$y_i = 3, 9, 19, 21, 23, 25, 27,$
$Q = \alpha/2 = 0.050$

Задача L-48.30. 1

$x_i = 6, 8, 12, 16, 20, 22$
$y_i = 4, 10, 14, 18, 24, 26, 28, 30$
$Q = \alpha/2 = 0.005$

Ответы.

Проверка гипотезы однородности выборок по Вилкоксону

30-Nov-19

№	$W_{набл}$	$W_{ниж}$	$W_{верх}$	Порядк.ном.	
1	41	24	60	2,4,6,8,10,11,	homogeneous
2	42	27	63	3,5,7,8,9,10,	homogeneous
3	34	27	57	2,3,5,7,8,9,	homogeneous
4	43	31	59	3,5,6,8,10,11,	homogeneous
5	32	25	65	2,3,4,6,8,9,	homogeneous
6	37	24	60	2,4,5,7,9,10,	homogeneous
7	37	25	65	2,4,5,7,9,10,	homogeneous
8	28	29	61	2,3,4,5,6,8,	
9	42	27	63	3,5,7,8,9,10,	homogeneous
10	39	31	59	2,4,6,8,9,10,	homogeneous
11	38	27	63	3,4,5,7,9,10,	homogeneous
12	29	25	65	2,3,4,5,7,8,	homogeneous
13	37	31	59	3,4,6,7,8,9,	homogeneous
14	34	31	59	3,4,5,6,7,9,	homogeneous
15	34	27	57	2,4,5,6,8,9,	homogeneous
16	36	27	57	2,3,5,7,9,10,	homogeneous
17	28	24	60	2,3,4,5,6,8,	homogeneous
18	29	27	57	1,2,4,6,7,9,	homogeneous
19	37	27	57	2,4,5,7,9,10,	homogeneous
20	31	25	59	1,3,5,6,7,9,	homogeneous
21	34	30	54	2,3,5,7,8,9,	homogeneous
22	41	27	63	3,5,6,8,9,10,	homogeneous
23	34	25	65	2,4,5,6,8,9,	homogeneous
24	32	25	59	2,3,5,6,7,9,	homogeneous
25	32	24	60	1,3,5,6,8,9,	homogeneous
26	42	27	63	3,5,7,8,9,10,	homogeneous
27	45	27	63	3,5,7,9,10,11,	homogeneous
28	36	29	61	2,4,6,7,8,9,	homogeneous
29	31	30	54	2,3,5,6,7,8,	homogeneous
30	36	25	65	2,3,5,7,9,10,	homogeneous

L-48 файл 48L1-AnsA