

U-критерий Манна - Уитни

Протестировали образцы деталей, произведенных в двух разных фирмах (с, b). Получено число деталей, прошедших проверку на качество в различных испытаниях. Можно ли утверждать, детали одной фирмы качественней другой? Уровень значимости $\alpha = 0,05$.¹

Задача 13.1.

Азин Андрей

$$c = [23, 21, 27, 24, 18]$$

$$b = [14, 10, 17, 25, 32, 41, 36]$$

Задача 13.2.

Арефин Максим

$$c = [24, 20, 29, 27, 17]$$

$$b = [14, 10, 26, 30, 31, 41, 36]$$

Задача 13.3.

Булгакова Анна

$$c = [21, 16, 32, 27, 25]$$

$$b = [18, 14, 10, 31, 40, 39, 34]$$

Задача 13.4.

Быкова Евгения

$$c = [25, 22, 29, 27, 16]$$

$$b = [12, 10, 13, 18, 23, 28, 26]$$

Задача 13.5.

Викторов Александр

$$c = [27, 22, 37, 33, 18]$$

$$b = [16, 12, 10, 21, 38, 35, 28]$$

Задача 13.6.

Вольнов Кирилл

$$c = [22, 20, 37, 30, 17]$$

$$b = [25, 14, 10, 35, 41, 45, 43]$$

Задача 13.7.

Гречко Даниил

$$c = [19, 17, 22, 36, 31]$$

$$b = [18, 13, 10, 21, 41, 32, 26]$$

Задача 13.8.

Ермаков Даниил

$$c = [22, 21, 29, 27, 16]$$

$$b = [12, 10, 14, 18, 38, 36, 34]$$

Задача 13.9.

Захаренков Иван

$$c = [23, 17, 13, 34, 32]$$

$$b = [11, 10, 19, 27, 41, 40, 35]$$

Задача 13.10.

Малагин Даниил

$$c = [19, 16, 22, 31, 24]$$

$$b = [23, 13, 10, 29, 36, 39, 38]$$

Задача 13.11.

Мартынов Антон

$$c = [23, 18, 37, 33, 24]$$

$$b = [12, 10, 15, 21, 28, 43, 41]$$

Задача 13.12.

Махмутов Валентин

$$c = [20, 18, 34, 27, 21]$$

$$b = [16, 12, 10, 22, 36, 35, 32]$$

¹Просветов Г.И. Теория вероятностей и матем.статистика. М.:Алфа-Пресс. 2015. с. 186

Задача 13.13.*Мелешко Павел*

$$c = [20, 16, 31, 28, 22]$$

$$b = [14, 10, 15, 18, 26, 32, 29]$$

Задача 13.14.*Мохамед Али*

$$c = [17, 16, 20, 22, 21]$$

$$b = [11, 10, 14, 23, 28, 37, 32]$$

Задача 13.15.*Сионов Павел*

$$c = [21, 18, 17, 32, 26]$$

$$b = [13, 10, 19, 22, 41, 36, 30]$$

Задача 13.16.*Соколов Константин*

$$c = [18, 16, 14, 30, 20]$$

$$b = [15, 13, 10, 25, 35, 44, 39]$$

Задача 13.17.*Хохлов Александр*

$$c = [20, 15, 23, 26, 24]$$

$$b = [16, 11, 10, 27, 37, 33, 32]$$

Задача 13.18.*Новиков Станислав*

$$c = [18, 17, 19, 22, 21]$$

$$b = [26, 13, 10, 31, 38, 36, 32]$$