

## Проверка гипотезы о нормальном распределении по Пирсону

Проверить, согласуется ли при уровне значимости  $\alpha$  гипотеза о нормальном распределении совокупности  $X$  с эмпирическим распределением.<sup>1</sup>

**Задача 50.1.** *Азин Андрей*

$x_i = [8, 13, 18, 23, 28, 33, 38, 43]$

$n_i = [8, 13, 16, 17, 15, 13, 7, 2]$

$\alpha = 0.990$ .

**Задача 50.2.** *Арефин Максим*

$x_i = [9, 15, 21, 27, 33, 39, 45, 51]$

$n_i = [8, 13, 16, 17, 16, 13, 7, 5]$

$\alpha = 0.010$ .

**Задача 50.3.** *Булгакова Анна*

$x_i = [6, 9, 12, 15, 18, 21, 24, 27]$

$n_i = [8, 12, 16, 17, 15, 13, 7, 5]$

$\alpha = 0.990$ .

**Задача 50.4.** *Быкова Евгения*

$x_i = [5, 7, 9, 11, 13, 15, 17, 19]$

$n_i = [8, 12, 15, 16, 15, 13, 8, 8]$

$\alpha = 0.050$ .

**Задача 50.5.** *Викторов Александр*

$x_i = [9, 15, 21, 27, 33, 39, 45, 51, 57]$

$n_i = [9, 14, 18, 22, 20, 19, 14, 8, 5]$

$\alpha = 0.010$ .

**Задача 50.6.** *Вольнов Кирилл*

$x_i = [5, 7, 9, 11, 13, 15, 17, 19]$

$n_i = [7, 13, 15, 17, 15, 13, 7, 2]$

$\alpha = 0.950$ .

**Задача 50.7.** *Гречко Даниил*

$x_i = [6, 9, 12, 15, 18, 21, 24, 27, 30]$

$n_i = [10, 15, 19, 21, 22, 19, 14, 8, 3]$

$\alpha = 0.025$ .

**Задача 50.8.** *Ермаков Данила*

$x_i = [5, 7, 9, 11, 13, 15, 17, 19, 21]$

$n_i = [8, 15, 19, 21, 22, 20, 14, 8, 8]$

$\alpha = 0.990$ .

**Задача 50.9.** *Захаренков Иван*

$x_i = [8, 13, 18, 23, 28, 33, 38, 43]$

$n_i = [9, 12, 16, 18, 16, 14, 7, 7]$

$\alpha = 0.990$ .

**Задача 50.10.** *Малагин Даниил*

$x_i = [8, 13, 18, 23, 28, 33, 38, 43, 48]$

$n_i = [9, 16, 19, 22, 20, 20, 14, 8, 8]$

$\alpha = 0.990$ .

**Задача 50.11.** *Мартынов Антон*

$x_i = [5, 7, 9, 11, 13, 15, 17, 19]$

$n_i = [9, 13, 16, 18, 15, 14, 7, 7]$

$\alpha = 0.950$ .

**Задача 50.12.** *Махмутов Валентин*

$x_i = [5, 7, 9, 11, 13, 15, 17, 19]$

$n_i = [7, 12, 17, 17, 15, 14, 7, 3]$

$\alpha = 0.950$ .

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<sup>1</sup>Гмурман В.Е. Руководство к решению задач по теории вероятностей и математической статистике. М.:1969. с. 253.

**Задача 50.13.** *Мелешко Павел*

$$x_i = [5, 7, 9, 11, 13, 15, 17, 19, 21]$$

$$n_i = [9, 14, 19, 21, 20, 18, 14, 8, 10]$$

$$\alpha = 0.975.$$

**Задача 50.14.** *Мохамед Али*

$$x_i = [9, 15, 21, 27, 33, 39, 45, 51, 57]$$

$$n_i = [9, 16, 19, 21, 20, 19, 14, 8, 5]$$

$$\alpha = 0.950.$$

**Задача 50.15.** *Сионов Павел*

$$x_i = [8, 13, 18, 23, 28, 33, 38, 43]$$

$$n_i = [8, 14, 15, 18, 15, 14, 7, 2]$$

$$\alpha = 0.975.$$

**Задача 50.16.** *Соколов Константин*

$$x_i = [9, 15, 21, 27, 33, 39, 45, 51]$$

$$n_i = [8, 13, 17, 16, 15, 13, 7, 2]$$

$$\alpha = 0.975.$$

**Задача 50.17.** *Хохлов Александр*

$$x_i = [9, 15, 21, 27, 33, 39, 45, 51]$$

$$n_i = [8, 12, 15, 17, 16, 14, 7, 6]$$

$$\alpha = 0.950.$$

**Задача 50.18.** *Новиков Станислав*

$$x_i = [6, 9, 12, 15, 18, 21, 24, 27, 30]$$

$$n_i = [9, 16, 20, 20, 19, 19, 14, 8, 7]$$

$$\alpha = 0.050.$$