

Проверка гипотезы о нормальном распределении по Пирсону

Проверить, согласуется ли при уровне значимости α гипотеза о нормальном распределении совокупности X с эмпирическим распределением.¹

Задача 50.1. *Абалимов Александр*

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

$n_i = [8, 15, 19, 21, 22, 19, 14, 8, 11]$

$\alpha = 0.025$.

Задача 50.2.

Антощенкова

Анастасия

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

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

$\alpha = 0.950$.

Задача 50.3. *Безруков Игорь*

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

$n_i = [8, 15, 18, 22, 21, 19, 14, 8, 2]$

$\alpha = 0.975$.

Задача 50.4. *Безъязыков Александр*

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

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

$\alpha = 0.025$.

Задача 50.5. *Габбасова Камилла*

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

$n_i = [9, 14, 18, 22, 20, 18, 14, 8, 6]$

$\alpha = 0.975$.

Задача 50.6. *Дворский Андрей*

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

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

$\alpha = 0.010$.

Задача 50.7. *Демидов Александр*

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

$n_i = [9, 16, 19, 21, 22, 19, 14, 8, 8]$

$\alpha = 0.050$.

Задача 50.8. *Дробчик Георгий*

$x_i = [7, 11, 15, 19, 23, 27, 31, 35]$

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

$\alpha = 0.950$.

Задача 50.9. *Кирпин Валерий*

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

$n_i = [8, 13, 16, 16, 15, 14, 7, 11]$

$\alpha = 0.025$.

Задача 50.10. *Королева Татьяна*

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

$n_i = [9, 13, 16, 16, 17, 14, 7, 3]$

$\alpha = 0.950$.

Задача 50.11. *Кузнецов Степан*

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

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

$\alpha = 0.025$.

Задача 50.12. *Майков Дмитрий*

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

$n_i = [9, 15, 18, 21, 20, 20, 14, 8, 7]$

$\alpha = 0.975$.

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

Задача 50.13. *Нессанс Эдгар*

Матъяс

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

$$n_i = [10, 14, 19, 21, 20, 18, 14, 8, 5]$$

$$\alpha = 0.990.$$

Задача 50.14.

Ромич Антон

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

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

$$\alpha = 0.050.$$

Задача 50.15. *Солдатов Александр*

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

$$n_i = [9, 16, 19, 21, 20, 18, 14, 8, 11]$$

$$\alpha = 0.010.$$

Задача 50.16.

Толмачёв Никита

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

$$n_i = [9, 15, 19, 21, 20, 18, 14, 8, 5]$$

$$\alpha = 0.050.$$

Задача 50.17. *Толушкин Ростислав*

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

$$n_i = [9, 15, 19, 20, 19, 18, 15, 8, 5]$$

$$\alpha = 0.050.$$

Задача 50.18.

Трифонов Дмитрий

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

$$n_i = [8, 13, 17, 16, 15, 12, 7, 6]$$

$$\alpha = 0.975.$$

Задача 50.19.

Чумаков Иван

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

$$n_i = [8, 13, 16, 17, 16, 13, 7, 6]$$

$$\alpha = 0.025.$$

Задача 50.20.

Шибанов Сергей

$$x_i = [7, 11, 15, 19, 23, 27, 31, 35, 39]$$

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

$$\alpha = 0.950.$$

Задача 50.21.

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

$$n_i = [10, 14, 19, 21, 20, 19, 14, 8, 11]$$

$$\alpha = 0.950.$$

Задача 50.22.

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

$$n_i = [8, 15, 20, 20, 22, 18, 14, 8, 3]$$

$$\alpha = 0.050.$$

Задача 50.23.

$$x_i = [7, 11, 15, 19, 23, 27, 31, 35]$$

$$n_i = [9, 14, 16, 17, 16, 13, 7, 8]$$

$$\alpha = 0.025.$$

Задача 50.24.

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

$$n_i = [9, 15, 20, 22, 21, 19, 14, 8, 6]$$

$$\alpha = 0.025.$$