

Ранговая корреляция Спирмена

Два эксперта X и Y выставили оценки десяти образцам продукции завода. Найти выборочный коэффициент корреляции Спирмена ρ_B между их оценками. ¹

Задача 44.1. *Алексахин Антон*

$X = [46, 43, 39, 38, 34, 32, 29, 25, 22, 19]$

$Y = [53, 35, 43, 48, 23, 13, 58, 28, 64, 18]$

Задача 44.2. *Балов Артём Игоревич*

$X = [46, 42, 40, 38, 35, 31, 29, 26, 22, 18]$

$Y = [54, 48, 63, 31, 19, 59, 13, 36, 24, 43]$

Задача 44.3. *Белоусов Георгий*

Михайлович

$X = [45, 42, 40, 38, 34, 31, 28, 26, 23, 19]$

$Y = [54, 48, 37, 42, 19, 11, 29, 62, 23, 59]$

Задача 44.4. *Бондаренко Андрей*

$X = [46, 42, 39, 37, 34, 31, 28, 24, 22, 20]$

$Y = [57, 49, 44, 28, 63, 18, 12, 33, 24, 52]$

Задача 44.5. *Гильманов Булат*

Наильевич

$X = [46, 42, 40, 38, 35, 31, 29, 26, 22, 19]$

$Y = [58, 48, 44, 25, 19, 54, 11, 30, 35, 63]$

Задача 44.6. *Егоров Всеволод*

Кириллович

$X = [46, 43, 40, 37, 34, 31, 29, 25, 22, 20]$

$Y = [53, 48, 63, 43, 22, 13, 17, 30, 37, 59]$

Задача 44.7. *Журавлева Анастасия*

$X = [47, 44, 40, 36, 34, 31, 28, 26, 23, 19]$

$Y = [58, 63, 43, 26, 49, 16, 12, 29, 53, 36]$

Задача 44.8. *.....*

$X = [46, 43, 40, 38, 34, 32, 29, 25, 22, 20]$

$Y = [59, 53, 64, 31, 23, 17, 10, 36, 49, 43]$

Задача 44.9. *Зубрильчев Даниил*

$X = [46, 43, 40, 36, 35, 32, 28, 25, 22, 19]$

$Y = [53, 43, 48, 28, 58, 18, 13, 64, 24, 36]$

Задача 44.10. *Изотов Роман Игоревич*

$X = [46, 44, 40, 37, 34, 32, 28, 24, 22, 19]$

$Y = [58, 53, 32, 43, 35, 23, 10, 49, 64, 17]$

Задача 44.11. *Луканин Александр*

Сергеевич

$X = [46, 43, 39, 37, 34, 30, 27, 24, 22, 19]$

$Y = [52, 48, 57, 62, 28, 12, 36, 42, 24, 17]$

Задача 44.12. *Семенов Дмитрий*

Сергеевич

$X = [45, 43, 40, 37, 33, 30, 28, 26, 22, 19]$

$Y = [53, 47, 43, 25, 19, 33, 58, 10, 30, 62]$

Задача 44.13. *Сен Субхам*

$X = [46, 43, 40, 37, 33, 30, 27, 24, 22, 19]$

$Y = [57, 48, 42, 52, 24, 19, 12, 30, 34, 62]$

Задача 44.14. *Степанова Светлана*

$X = [45, 42, 39, 37, 35, 32, 29, 26, 23, 19]$

$Y = [53, 49, 63, 28, 18, 12, 34, 58, 24, 43]$

¹Гмурман В.Е. Руководство к решению задач по теории вероятностей и математической статистике. М.:1969. с. 202.

Задача 44.15.*Уткин Артем**Евгеньевич*

$$X = [46, 43, 39, 37, 33, 31, 27, 24, 21, 18]$$

$$Y = [57, 53, 35, 63, 47, 23, 16, 10, 30, 42]$$

Задача 44.16. *Храпов Иван Николаевич*

$$X = [45, 43, 39, 38, 33, 31, 28, 25, 23, 20]$$

$$Y = [54, 48, 57, 36, 17, 23, 12, 63, 31, 43]$$

Задача 44.17.*Чернышев Егор**Вадимович*

$$X = [46, 43, 40, 38, 35, 32, 28, 25, 22, 19]$$

$$Y = [54, 58, 48, 28, 18, 22, 12, 64, 36, 43]$$

Задача 44.18.

$$X = [45, 44, 39, 36, 33, 31, 28, 24, 21, 18]$$

$$Y = [52, 64, 57, 47, 29, 23, 19, 13, 43, 36]$$

Задача 44.19.

$$X = [46, 43, 41, 37, 33, 31, 29, 26, 22, 18]$$

$$Y = [53, 47, 43, 24, 18, 59, 63, 13, 29, 38]$$

Задача 44.20.

$$X = [46, 43, 41, 37, 34, 30, 28, 25, 21, 19]$$

$$Y = [59, 47, 62, 22, 28, 18, 12, 44, 35, 52]$$

Задача 44.21.

$$X = [47, 44, 41, 37, 34, 31, 29, 25, 22, 20]$$

$$Y = [59, 52, 44, 24, 31, 14, 64, 38, 48, 19]$$

Задача 44.22.

$$X = [46, 42, 41, 36, 35, 31, 27, 24, 22, 20]$$

$$Y = [52, 43, 58, 36, 25, 13, 18, 28, 62, 49]$$