

Выборочный коэффициент ранговой корреляции Кендалла

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

Задача 45.1. *Азин Андрей*

$X = [47, 44, 40, 36, 34, 32, 29, 25, 21, 19]$

$Y = [22, 64, 29, 35, 59, 52, 44, 11, 47, 16]$

$\tau_B = ?$

Задача 45.2. *Арефин Максим*

$X = [46, 43, 40, 38, 35, 31, 29, 25, 21, 19]$

$Y = [59, 24, 44, 30, 53, 63, 13, 36, 48, 18]$

$\tau_B = ?$

Задача 45.3. *Булгакова Анна*

$X = [45, 43, 39, 37, 35, 31, 28, 25, 21, 19]$

$Y = [53, 31, 44, 58, 62, 22, 13, 35, 48, 17]$

$\tau_B = ?$

Задача 45.4. *Быкова Евгения*

$X = [46, 42, 41, 36, 34, 30, 27, 24, 22, 19]$

$Y = [52, 23, 58, 62, 30, 49, 10, 42, 35, 16]$

$\tau_B = ?$

Задача 45.5. *Викторов Александр*

$X = [47, 43, 40, 37, 35, 32, 28, 25, 23, 19]$

$Y = [18, 42, 64, 28, 57, 26, 14, 49, 54, 37]$

$\tau_B = ?$

Задача 45.6. *Вольнов Кирилл*

$X = [45, 43, 41, 38, 34, 31, 27, 25, 22, 18]$

$Y = [54, 24, 47, 58, 62, 18, 42, 36, 13, 30]$

$\tau_B = ?$

Задача 45.7. *Гречко Даниил*

$X = [46, 43, 40, 38, 34, 31, 28, 26, 22, 19]$

$Y = [54, 23, 36, 44, 62, 17, 11, 58, 48, 31]$

$\tau_B = ?$

Задача 45.8. *Ермаков Данила*

$X = [45, 44, 39, 37, 34, 32, 29, 26, 23, 19]$

$Y = [53, 19, 49, 58, 22, 64, 12, 31, 43, 34]$

$\tau_B = ?$

Задача 45.9. *Захаренков Иван*

$X = [46, 44, 41, 38, 33, 32, 28, 24, 21, 18]$

$Y = [58, 31, 35, 64, 53, 24, 19, 47, 12, 43]$

$\tau_B = ?$

Задача 45.10. *Малагин Даниил*

$X = [46, 43, 39, 37, 33, 31, 28, 26, 22, 19]$

$Y = [43, 47, 34, 58, 21, 53, 19, 12, 63, 29]$

$\tau_B = ?$

Задача 45.11. *Мартынов Антон*

$X = [45, 43, 41, 36, 33, 32, 28, 24, 21, 18]$

$Y = [52, 42, 58, 35, 63, 23, 30, 16, 11, 47]$

$\tau_B = ?$

Задача 45.12. *Махмутов Валентин*

$X = [46, 42, 39, 37, 34, 31, 28, 25, 22, 19]$

$Y = [53, 17, 58, 34, 62, 49, 13, 43, 23, 29]$

$\tau_B = ?$

¹Гмурман В.Е. Руководство к решению задач по теории вероятностей и математической статистике. М.:1969. с. 204.

Задача 45.13. *Мелешко Павел*

$X = [46, 42, 40, 36, 34, 31, 28, 25, 22, 18]$

$Y = [42, 48, 58, 35, 23, 53, 16, 12, 30, 63]$

$\tau_B = ?$

Задача 45.14. *Мохамед Али*

$X = [47, 44, 40, 37, 35, 32, 28, 25, 23, 20]$

$Y = [19, 64, 43, 30, 58, 11, 34, 49, 24, 54]$

$\tau_B = ?$

Задача 45.15. *Сионов Павел*

$X = [46, 44, 40, 37, 33, 31, 27, 25, 23, 19]$

$Y = [18, 63, 36, 42, 57, 53, 30, 10, 23, 48]$

$\tau_B = ?$

Задача 45.16. *Соколов Константин*

$X = [46, 43, 41, 37, 34, 32, 29, 25, 21, 18]$

$Y = [25, 59, 47, 30, 52, 63, 42, 18, 12, 37]$

$\tau_B = ?$

Задача 45.17. *Хохлов Александр*

$X = [45, 43, 40, 36, 35, 32, 28, 25, 22, 19]$

$Y = [53, 31, 43, 37, 63, 26, 14, 48, 57, 15]$

$\tau_B = ?$

Задача 45.18. *Новиков Станислав*

$X = [46, 43, 40, 36, 33, 32, 28, 25, 22, 18]$

$Y = [57, 27, 53, 43, 47, 22, 16, 64, 12, 36]$

$\tau_B = ?$