

Множества. Операции. Мощность.

Универсальное множество состоит из 26 строчных букв латинского алфавита.
Заданы множества A , B , C и D . Вычислить мощность множеств X и Y .

Задача 4.1. Бондаренко

Елена

$$\begin{aligned}A &= \{b, g, j, l, m\}, \\B &= \{c, d, l, q, v\}, \\C &= \{k, l, t\}, \\D &= \{a, c, i, l, z\}. \\X &= (A \cup B) \cap C, \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.2. Гамзин Дмитрий

$$\begin{aligned}A &= \{b, c, h, n, r\}, \\B &= \{b, d, e, l, q, w\}, \\C &= \{o, p, u, v\}, \\D &= \{a, d, m, p, q, u, v\}. \\X &= (A \setminus B) \cap (C \cap D), \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.3. Горячев Алексей

$$\begin{aligned}A &= \{a, b, d, e, f, p\}, \\B &= \{d, e, g, n, z\}, \\C &= \{b, c, k, l, m, q\}, \\D &= \{a, d, r, s, w, x\}. \\X &= (A \setminus B) \cap (C \cap D), \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.4. Граблина

Анастасия

$$\begin{aligned}A &= \{a, c, f, j, k\}, \\B &= \{a, g, i, j, k, z\}, \\C &= \{c, d, l, m, p\}, \\D &= \{b, i, o, p, t, u\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (A \setminus D) \cup (\overline{C \setminus B}).\end{aligned}$$

Задача 4.5. Дзамихов

Азамат

$$\begin{aligned}A &= \{a, e, k, o, r\}, \\B &= \{d, e, k, p, u\}, \\C &= \{a, b, s, t, u, v\}, \\D &= \{d, y, z\}. \\X &= (A \setminus B) \cap (C \cap D), \\Y &= (\overline{A \cap B}) \setminus (C \cup D).\end{aligned}$$

Задача 4.6. Золоев Тимур

$$\begin{aligned}A &= \{b, k, m, o, r\}, \\B &= \{g, h, o, x, y\}, \\C &= \{l, m\}, \\D &= \{a, g, j, q\}. \\X &= (A \cap C) \cup B, \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.7. Квардакова

Елизавета

$$\begin{aligned}A &= \{a, c, g, i, q, s\}, \\B &= \{a, j, k, p\}, \\C &= \{k, l, z\}, \\D &= \{b, h, j, o, p, r, t, u\}. \\X &= (A \cap C) \cup (D \cap B), \\Y &= (A \setminus D) \cup (\overline{C \setminus B}).\end{aligned}$$

Задача 4.8. Кирьяк Вадим

$$\begin{aligned}A &= \{b, c, k, o, y\}, \\B &= \{c, j, k, m, z\}, \\C &= \{n, o, q\}, \\D &= \{j, n, q, r, v, w, x\}. \\X &= (A \cap C) \cup (D \cap B), \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.9. Кожемяко Ирина

$$\begin{aligned}A &= \{c, d, e, g, j\}, \\B &= \{b, c, d, j, n\}, \\C &= \{e, f, l, m, q, r\}, \\D &= \{b, d, r, s, w, x\}. \\X &= (A \cup D) \cap C, \\Y &= (A \setminus D) \cup (\overline{C \setminus B}).\end{aligned}$$

Задача 4.10. Кремнев

Алексей

$$\begin{aligned}A &= \{g, l, o\}, \\B &= \{c, d, g, q\}, \\C &= \{k, l\}, \\D &= \{c, k, n, u, v, z\}. \\X &= (A \cup B) \cap C, \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.11. Кузин Юрий

$$\begin{aligned}A &= \{b, e, g, m\}, \\B &= \{g, h, i, q, v\}, \\C &= \{d, e, l, o, p, q\}, \\D &= \{d, h, l, u, v, z\}. \\X &= (A \setminus C) \cap \overline{B}, \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.12. Ложкина Юлия

$$\begin{aligned}A &= \{b, g, k, n, p, x\}, \\B &= \{i, j, n, r, x\}, \\C &= \{h, i\}, \\D &= \{a, f, i, o\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.13. Луковников

Артем

$$\begin{aligned}A &= \{a, b, d, e, f, l\}, \\B &= \{b, g, h, i, l, x\}, \\C &= \{e, f, k, p, r, s\}, \\D &= \{d, g, k, p, q, u, v\}. \\X &= (A \cap C) \cup B, \\Y &= (\overline{A \cap B}) \setminus (C \cup D).\end{aligned}$$

Задача 4.14. Малахов

Дмитрий

$$\begin{aligned}A &= \{a, d, e, m, n, u\}, \\B &= \{e, i, j, o, r\}, \\C &= \{d, e, y, z\}, \\D &= \{c, i, l, s, t, x, y\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (\overline{A \cap B}) \setminus (C \cup D).\end{aligned}$$

Задача 4.15. Минь Герман

$$\begin{aligned}A &= \{b, f, h, k, n, p\}, \\B &= \{b, c, f, p, y\}, \\C &= \{o, p, v\}, \\D &= \{a, b, m, o, t, u, y, z\}. \\X &= (A \cup D) \cap C, \\Y &= (\overline{A \cap D}) \cup (C \setminus B).\end{aligned}$$

Задача 4.16. *Парсегов Олег*

$$\begin{aligned}A &= \{a, f, i, m, u, z\}, \\B &= \{f, h, i, p, v\}, \\C &= \{m, n\}, \\D &= \{h, l, t, u, y, z\}. \\X &= (A \setminus C) \cap \overline{B}, \\Y &= (\overline{A} \cap \overline{B}) \setminus (C \cup D).\end{aligned}$$

Задача 4.19. *Рябинина Марина*

$$\begin{aligned}A &= \{a, c, g, h, i\}, \\B &= \{f, g, h, j, r\}, \\C &= \{c, d, o, p\}, \\D &= \{b, f, v, w\}. \\X &= (A \cap B) \cup C, \\Y &= (A \setminus D) \cup (\overline{C} \setminus \overline{B}).\end{aligned}$$

Задача 4.22. *Шапкин Данил*

$$\begin{aligned}A &= \{a, c, i, l, u\}, \\B &= \{c, i, j, m, u\}, \\C &= \{k, l, u, v\}, \\D &= \{i, k, q, r, t, v, w\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.17. *Попадьин Сергей*

$$\begin{aligned}A &= \{b, c, f, m, n, v\}, \\B &= \{h, i, m, p, v, w\}, \\C &= \{p, q, t, x\}, \\D &= \{b, h, m, u\}. \\X &= (A \setminus C) \cap \overline{B}, \\Y &= (A \setminus D) \cup (\overline{C} \setminus \overline{B}).\end{aligned}$$

Задача 4.20. *Синькова Мария*

$$\begin{aligned}A &= \{i, n, o, r\}, \\B &= \{c, d, n, x\}, \\C &= \{n, o\}, \\D &= \{c, n, q\}. \\X &= (A \cup B) \cap C, \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.23. *Швалучинский Владимир*

$$\begin{aligned}A &= \{c, e, k, t\}, \\B &= \{c, i, j, m, p, y\}, \\C &= \{j, k, y\}, \\D &= \{i, j, q, r, s, v, w\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.18. *Романов Сергей*

$$\begin{aligned}A &= \{a, b, c, e\}, \\B &= \{b, c, d, e, m, u\}, \\C &= \{b, c, d, f, g, h\}, \\D &= \{a, d, q, r, v, w\}. \\X &= (A \setminus B) \cap (C \cap D), \\Y &= (\overline{A} \cap D) \cup (C \setminus B).\end{aligned}$$

Задача 4.21. *Цветков Сергей*

$$\begin{aligned}A &= \{m, n, o, u\}, \\B &= \{g, h, o, y\}, \\C &= \{m, n\}, \\D &= \{g, m, t\}. \\X &= (A \cap C) \cup B, \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.24. *Шумилин Василий*

$$\begin{aligned}A &= \{a, b, g, l, o\}, \\B &= \{c, f, g, l, v\}, \\C &= \{a, h, i, p\}, \\D &= \{f, z\}. \\X &= (A \cap B) \cup C, \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$