

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. Бочкарёв Дмитрий

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

Задача 4.4. Гришин Кирилл

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

Задача 4.7. Мелешенко Артём

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

Задача 4.10. Роговин Павел

$$\begin{aligned}A &= \{d, h, i, j, n\}, \\B &= \{d, e, i, r, s\}, \\C &= \{i, j, n, v\}, \\D &= \{d, i, m, w, x\}. \\X &= (A \setminus B) \cap (C \cap D), \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.13. Симонов Лев

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

Задача 4.2. Зайцев Сергей

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

Задача 4.5. Маленкин Валерий

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

Задача 4.8. Новожилов Александр

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

Задача 4.11. Рыжикова Софья

$$\begin{aligned}A &= \{b, c, l, m\}, \\B &= \{j, k, m, n, w\}, \\C &= \{d, e, t, u, x\}, \\D &= \{a, b, j, k\}. \\X &= (A \cap C) \cup (D \cap B), \\Y &= (A \setminus D) \cup (\overline{C} \setminus \overline{B}).\end{aligned}$$

Задача 4.14. Скиданова Анастасия

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

Задача 4.3. Крысина Венера

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

Задача 4.6. Маслов Кирилл

$$\begin{aligned}A &= \{d, e, f, h, o\}, \\B &= \{h, i, j, r, x\}, \\C &= \{e, f, k, s, t, u\}, \\D &= \{e, i, n, v, w\}. \\X &= (A \cap B) \cup (D \cap C), \\Y &= (A \cap \overline{B}) \cup (C \setminus D).\end{aligned}$$

Задача 4.9. Поздняков Леонид

$$\begin{aligned}A &= \{c, i, j, n, s\}, \\B &= \{j, k, n, s, x\}, \\C &= \{k, l\}, \\D &= \{b, h, j, r\}. \\X &= (A \cap C) \cup (D \cap B), \\Y &= (A \setminus D) \cup (\overline{C} \setminus \overline{B}).\end{aligned}$$

Задача 4.12. Свербий Юлия

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

Задача 4.15. Тимощук Павел

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

Задача 4.16. Толстопятов

Александр

$$A = \{b, d, g, h, k, q\},$$

$$B = \{d, f, g, n, s\},$$

$$C = \{l, m, r, y\},$$

$$D = \{a, f, j, p, r, s, w, x\}.$$

$$X = (A \cap B) \cup C,$$

$$Y = (\overline{A} \cap D) \cup (C \setminus B).$$

Задача 4.19. Чекленкова

Екатерина

$$A = \{b, c, i, j, r, w\},$$

$$B = \{i, j, k, t, v\},$$

$$C = \{k, l, t, x, y\},$$

$$D = \{b, h, i, q, x, y\}.$$

$$X = (A \cap B) \cup (D \cap C),$$

$$Y = (A \setminus D) \cup (\overline{C} \setminus \overline{B}).$$

Задача 4.22. Яковлев Максим

$$A = \{c, g, h, j, k, y\},$$

$$B = \{c, d, k, o, u\},$$

$$C = \{i, j, r, z\},$$

$$D = \{b, c, f, i, y, z\}.$$

$$X = (A \cup B) \cap C,$$

$$Y = (A \setminus D) \cup (\overline{C} \setminus \overline{B}).$$

Задача 4.17. Федина Светлана

$$A = \{a, c, i, l, z\},$$

$$B = \{d, h, i, l, v, w\},$$

$$C = \{a, b, i, j, l\},$$

$$D = \{h, z\}.$$

$$X = (A \setminus C) \cap \overline{B},$$

$$Y = (\overline{A} \cap \overline{B}) \setminus (C \cup D).$$

Задача 4.20. Чуркин Павел

$$A = \{a, b, k, r, s\},$$

$$B = \{b, h, i, l, u\},$$

$$C = \{j, k, t\},$$

$$D = \{h, j, p, q, r, u, v\}.$$

$$X = (A \setminus C) \cap \overline{B},$$

$$Y = (A \cap \overline{B}) \cup (C \setminus D).$$

Задача 4.23. zzz!

$$A = \{a, c, d, l, x\},$$

$$B = \{a, b, d, l, u, v\},$$

$$C = \{b, c, e, k, l\},$$

$$D = \{a, b, c, z\}.$$

$$X = (A \cup B) \cap D,$$

$$Y = (A \cap \overline{B}) \cup (C \setminus D).$$

Задача 4.18. Фишер Денис

$$A = \{m, n, t\},$$

$$B = \{f, g, m, w\},$$

$$C = \{m, n\},$$

$$D = \{f, m, s\}.$$

$$X = (A \cap B) \cup C,$$

$$Y = (A \cap \overline{B}) \cup (C \setminus D).$$

Задача 4.21. Шпынёв Дмитрий

$$A = \{a, f, g, i, n\},$$

$$B = \{g, h, i, o, q\},$$

$$C = \{f, g, t, w, y, z\},$$

$$D = \{e, h, m, u, v, z\}.$$

$$X = (A \setminus C) \cap \overline{B},$$

$$Y = (\overline{A} \cap \overline{B}) \setminus (C \cup D).$$