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

$A = \{a, j, m, p\}$,
$B = \{a, f, g, k, w\}$,
$C = \{i, j, k\}$,
$D = \{f, i, o, p, t, u\}$.
$X = (A \cap B) \cup C$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.2

$A = \{b, c, d, g, l\}$,
$B = \{b, e, f, k, l, x\}$,
$C = \{i, j, p, v, w\}$,
$D = \{b, e, f, k, p, q, u, v\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.3

$A = \{b, c, k, n, o, w\}$,
$B = \{h, i, n, x, z\}$,
$C = \{p, q, r\}$,
$D = \{a, h, n, v\}$.
$X = (A \backslash C) \cap \overline{B}$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.4

$A = \{b, d, g, j, o\}$,
$B = \{b, c, d, l, v\}$,
$C = \{h, i, k, y\}$,
$D = \{a, c, f, i, p, q, u, v\}$.
$X = (A \cup B) \cap C$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.5

$A = \{b, e, h, i\}$,
$B = \{a, b, h, j, r, v\}$,
$C = \{i, j, k, m, v, w\}$,
$D = \{a, g, h, v, w\}$.
$X = (A \cup B) \cap D$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.6

$A = \{f, i, k, s\}$,
$B = \{j, k, t, u\}$,
$C = \{h, i, o\}$,
$D = \{h, j, r, y, z\}$.
$X = (A \cap C) \cup (D \cap B)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.7

$A = \{b, f, g, i, j, m\}$,
$B = \{a, b, m, o, w, z\}$,
$C = \{j, k, p\}$,
$D = \{a, h, i\}$.
$X = (A \cup B) \cap D$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.8

$A = \{b, h, l, m, u\}$,
$B = \{i, j, l, v, y\}$,
$C = \{m, n, t\}$,
$D = \{a, i, k, t, z\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.9

$A = \{a, i, n, w\}$,
$B = \{i, j, n, o, u, x\}$,
$C = \{n, o, w, x\}$,
$D = \{i, m, v\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (\overline{A} \cap \overline{B}) \backslash (C \cup D)$.

4.3

Задача 4.10

$A = \{c, j, n, o, s\}$,
$B = \{i, j, n, x, y\}$,
$C = \{l, m, t\}$,
$D = \{b, i, r\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.11

$A = \{a, i, j, k, q\}$,
$B = \{a, g, h, k, s\}$,
$C = \{i, j, u, z\}$,
$D = \{g, i, o, p, t, u\}$.
$X = (A \cap C) \cup B$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.12

$A = \{f, g, l, n, p\}$,
$B = \{f, i, j, p, u\}$,
$C = \{f, g, s\}$,
$D = \{f, i, o, t, u, y, z\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.13

$A = \{c, g, h, l, m\}$,
$B = \{e, f, g, q, t\}$,
$C = \{j, k, u, y\}$,
$D = \{b, e, g, l, u, v, z\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.14

$A = \{b, c, d, g, j, n\}$,
$B = \{d, e, f, l, n\}$,
$C = \{d, e, p, q, r, s\}$,
$D = \{a, b, e, f, r, s, w, x\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.15

$A = \{a, c, h, l, o\}$,
$B = \{a, d, e, k, w\}$,
$C = \{j, k, o, w, x\}$,
$D = \{b, d, g, k, o, p, t, u\}$.
$X = (A \backslash B) \cap (C \cap D)$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.16

$A = \{c, m, o, p\}$,
$B = \{c, j, k, m, r\}$,
$C = \{b, c, s, y, z\}$,
$D = \{b, j, l, q, r, v, w\}$.
$X = (A \cap C) \cup (D \cap B)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.17

$A = \{b, c, d, j, m, q\}$,
$B = \{a, b, j, p, t\}$,
$C = \{d, e, q, t, w, x\}$,
$D = \{a, b, c, x, y\}$.
$X = (A \cup B) \cap D$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.18

$A = \{a, b, g, k, q, r\}$,
$B = \{f, g, l, q, u\}$,
$C = \{l, m, r\}$,
$D = \{a, f, j, p, u, v, z\}$.
$X = (A \cap B) \cup C$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.19

$A = \{a, f, h, n, s\}$,
$B = \{f, g, h, n, r, z\}$,
$C = \{h, i, t, z\}$,
$D = \{f, g, m, v, w\}$.
$X = (A \cap B) \cup C$,
$Y = (\overline{A} \cap \overline{B}) \backslash (C \cup D)$.

4.3

Задача 4.20

$A = \{a, b, f, j, n, t\}$,
$B = \{e, f, k, n, x\}$,
$C = \{b, c, p, q, u\}$,
$D = \{a, e\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.21

$A = \{a, c, e, f, k, u\}$,
$B = \{a, b, f, k, u\}$,
$C = \{g, h, o, p, z\}$,
$D = \{a, b, d, e, y, z\}$.
$X = (A \cup B) \cap D$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Задача 4.22

$A = \{a, g, m, p, v\}$,
$B = \{i, j, m, n, w\}$,
$C = \{g, h, w, y, z\}$,
$D = \{f, i, o\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (\overline{A} \cap \overline{B}) \backslash (C \cup D)$.

4.3

Задача 4.23

$A = \{d, i, w\}$,
$B = \{e, f, i, m, s\}$,
$C = \{c, d, r, u, v\}$,
$D = \{c, e, h, w, x\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.24

$A = \{a, b, c, j, x\}$,
$B = \{a, d, g, h, k, u\}$,
$C = \{d, e, k, l\}$,
$D = \{a, b, g, i, o, p, t, u\}$.
$X = (A \cap C) \cup B$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.25

$A = \{a, e, k, l, r, y\}$,
$B = \{e, f, g, o, w\}$,
$C = \{l, m\}$,
$D = \{f, k, q, s, t, x, y\}$.
$X = (A \cap B) \cup C$,
$Y = (\overline{A} \cap \overline{B}) \backslash (C \cup D)$.

4.3

Задача 4.26

$A = \{b, d, g, l, m, z\}$,
$B = \{d, e, f, n, t\}$,
$C = \{h, i, y\}$,
$D = \{a, e, f, k, r, s, w, x\}$.
$X = (A \backslash B) \cap (\overline{C} \cap D)$,
$Y = (\overline{A} \cap D) \cup (C \backslash B)$.

4.3

Задача 4.27

$A = \{c, h, l\}$,
$B = \{c, d, e, m, p\}$,
$C = \{g, h, t\}$,
$D = \{d, g, k, q, r, v, w\}$.
$X = (A \backslash B) \cap (C \cap D)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.28

$A = \{f, i, l, u\}$,
$B = \{i, j, r, s, z\}$,
$C = \{k, l\}$,
$D = \{i, k, t, w, x\}$.
$X = (A \cap B) \cup (D \cap C)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.29

$A = \{d, g, k, u\}$,
$B = \{d, j, k, n, r\}$,
$C = \{j, k\}$,
$D = \{j, r, s, t, w, x\}$.
$X = (A \cap C) \cup (D \cap B)$,
$Y = (A \cap \overline{B}) \cup (C \backslash D)$.

4.3

Задача 4.30

$A = \{c, e, j, l, o\}$,
$B = \{c, d, e, o, v\}$,
$C = \{n, o, y\}$,
$D = \{b, c, k, n, s, t, x, y\}$.
$X = (A \cup B) \cap C$,
$Y = (A \backslash D) \cup (\overline{C} \backslash \overline{B})$.

4.3

Множества. Операции. Мощность.

№	Card(X)	Card(Y)		
1	4	4	$(A \cap \overline{B})$=j,m,p	$(C \setminus D)$=j,k
2	0	9	$A \setminus D$=c,d,g,l	$\overline{C} \setminus \overline{B}$=b,e,f,k,l,x
3	5	6	$(\overline{A} \cap D)$=a,h,v	$(C \setminus B)$=p,q,r
4	0	11	$(\overline{A} \cap D)$=a,c,f,i,p,q,u,v	$(C \setminus B)$=h,i,k,y
5	3	7	$(\overline{A} \cap D)$=a,g,v,w	$(C \setminus B)$=i,k,m,w
6	2	4	$(A \cap \overline{B})$=f,i,s	$(C \setminus D)$=i,o
7	2	5	$(\overline{A} \cap D)$=a,h	$(C \setminus B)$=j,k,p
8	2	7	$(\overline{A} \cap D)$=a,i,k,t,z	$(C \setminus B)$=m,n,t
9	2	16	$(\overline{A} \cap \overline{B})$=b,c,d,e,f,g,h,k,l,m,p,q,r,s,t,v,y,z	$(C \cup D)$=i,m,n,o,v,w,x
10	2	8	$A \setminus D$=c,j,n,o,s	$\overline{C} \setminus \overline{B}$=i,j,n,x,y
11	7	4	$(A \cap \overline{B})$=i,j,q	$(C \setminus D)$=j,z
12	2	4	$(A \cap \overline{B})$=g,l,n	$(C \setminus D)$=g,s
13	1	8	$A \setminus D$=c,h,m	$\overline{C} \setminus \overline{B}$=e,f,g,q,t
14	1	7	$A \setminus D$=c,d,g,j,n	$\overline{C} \setminus \overline{B}$=f,l,n
15	1	6	$A \setminus D$=a,c,h,l	$\overline{C} \setminus \overline{B}$=a,d,e
16	3	6	$(A \cap \overline{B})$=o,p	$(C \setminus D)$=c,s,y,z
17	3	7	$(\overline{A} \cap D)$=a,x,y	$(C \setminus B)$=d,e,q,w,x
18	5	8	$(\overline{A} \cap D)$=f,j,p,u,v,z	$(C \setminus B)$=m,r
19	6	13	$(\overline{A} \cap \overline{B})$=b,c,d,e,i,j,k,l,m,o,p,q,t,u,v,w,x,y	$(C \cup D)$=f,g,h,i,m,t,v,w,z
20	1	6	$(\overline{A} \cap D)$=e	$(C \setminus B)$=b,c,p,q,u
21	3	6	$A \setminus D$=c,f,k,u	$\overline{C} \setminus \overline{B}$=a,b,f,k,u
22	1	12	$(\overline{A} \cap \overline{B})$=b,c,d,e,f,h,k,l,o,q,r,s,t,u,x,y,z	$(C \cup D)$=f,g,h,i,o,w,y,z
23	1	5	$(A \cap \overline{B})$=d,w	$(C \setminus D)$=d,r,u,v
24	6	8	$(\overline{A} \cap D)$=g,i,o,p,t,u	$(C \setminus B)$=e,l
25	3	11	$(\overline{A} \cap \overline{B})$=b,c,d,h,i,j,m,n,p,q,s,t,u,v,x,z	$(C \cup D)$=f,k,l,m,q,s,t,x,y
26	0	11	$(\overline{A} \cap D)$=a,e,f,k,r,s,w,x	$(C \setminus B)$=h,i,y
27	0	3	$(A \cap \overline{B})$=h,l	$(C \setminus D)$=h,t
28	2	3	$(A \cap \overline{B})$=f,l,u	$(C \setminus D)$=l
29	3	3	$(A \cap \overline{B})$=g,u	$(C \setminus D)$=k
30	1	7	$A \setminus D$=e,j,l,o	$\overline{C} \setminus \overline{B}$=c,d,e,v