

Abstract Algebra

Cayley Tables

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+	0	1	2	3	4
0	0	1	2	3	4
1	1	2	3	4	0
2	2	3	4	0	1
3	3	4	0	1	2
4	4	0	1	2	3

·	0	1	2	3	4
0	0	0	0	0	0
1	0	1	2	3	4
2	0	2	4	1	3
3	0	3	1	4	2
4	0	4	3	2	1

$\mathcal{P}(a, b, c)$

+	-	a	b	c	ab	ac	bc	abc
-	-	a	b	c	ab	ac	bc	abc
a	a	-	ab	ac	b	c	abc	bc
b	b	ab	-	bc	a	abc	c	ac
c	c	ac	bc	-	abc	a	b	ab
ab	ab	b	a	abc	-	bc	ac	c
ac	ac	c	abc	a	bc	-	ab	b
bc	bc	abc	c	b	ac	ab	-	a
abc	abc	bc	ac	ab	c	b	a	-

·	-	a	b	c	ab	ac	bc	abc
-	-	-	-	-	-	-	-	-
a	-	a	-	-	a	a	-	a
b	-	-	b	-	b	-	b	b
c	-	-	-	c	-	c	c	c
ab	-	a	b	-	ab	a	b	ab
ac	-	a	-	c	a	ac	c	ac
bc	-	-	b	c	b	c	bc	bc
abc	-	a	b	c	ab	ac	bc	abc