

Modulus 1

	-1
(1,)	1

Modulus 2

	-1
(1,)	1

Modulus 3

	-1	1
(1,)	1	1
(2,)	-1	1

Modulus 4

	-1	1
(1,)	1	1
(3,)	-1	1

Modulus 5

	-1	1	2	3
(1,)	1	1	1	1
(2,)	-1	1	i	-i
(3,)	-1	1	-i	i
(4,)	1	1	-1	-1

Modulus 6

	-1	1
(1,)	1	1
(5,)	-1	1

Modulus 7

	-1	1	2	3	4	5
(1,)	1	1	1	1	1	1
(2,)	1	1	e(2/3)	e(1/3)	e(1/3)	e(2/3)
(3,)	-1	1	e(1/3)	e(1/6)	e(2/3)	e(5/6)
(4,)	1	1	e(1/3)	e(2/3)	e(2/3)	e(1/3)
(5,)	-1	1	e(2/3)	e(5/6)	e(1/3)	e(1/6)
(6,)	-1	1	1	-1	1	-1

Modulus 8

	-1	1	3	5
(1,)	1	1	1	1
(3,)	-1	1	1	-1
(5,)	1	1	-1	-1
(7,)	-1	1	-1	1

Modulus 9

	-1	1	2	4	5	7
(1,)	1	1	1	1	1	1
(2,)	-1	1	e(1/6)	e(1/3)	e(5/6)	e(2/3)
(4,)	1	1	e(1/3)	e(2/3)	e(2/3)	e(1/3)
(5,)	-1	1	e(5/6)	e(2/3)	e(1/6)	e(1/3)
(7,)	1	1	e(2/3)	e(1/3)	e(1/3)	e(2/3)
(8,)	-1	1	-1	1	-1	1

Modulus 10

	-1	1	3	7
(1,)	1	1	1	1
(3,)	-1	1	i	-i
(7,)	-1	1	-i	i
(9,)	1	1	-1	-1

Modulus 11

	-1	1	2	3	4	5	6	7	8	9
(1,)	1	1	1	1	1	1	1	1	1	1
(2,)	-1	1	e(1/10)	e(4/5)	e(1/5)	e(2/5)	e(9/10)	e(7/10)	e(3/10)	e(3/5)
(3,)	1	1	e(4/5)	e(2/5)	e(3/5)	e(1/5)	e(1/5)	e(3/5)	e(2/5)	e(4/5)
(4,)	1	1	e(1/5)	e(3/5)	e(2/5)	e(4/5)	e(4/5)	e(2/5)	e(3/5)	e(1/5)
(5,)	1	1	e(2/5)	e(1/5)	e(4/5)	e(3/5)	e(3/5)	e(4/5)	e(1/5)	e(2/5)
(6,)	-1	1	e(9/10)	e(1/5)	e(4/5)	e(3/5)	e(1/10)	e(3/10)	e(7/10)	e(2/5)
(7,)	-1	1	e(7/10)	e(3/5)	e(2/5)	e(4/5)	e(3/10)	e(9/10)	e(1/10)	e(1/5)
(8,)	-1	1	e(3/10)	e(2/5)	e(3/5)	e(1/5)	e(7/10)	e(1/10)	e(9/10)	e(4/5)
(9,)	1	1	e(3/5)	e(4/5)	e(1/5)	e(2/5)	e(2/5)	e(1/5)	e(4/5)	e(3/5)
(10,)	-1	1	-1	1	1	1	-1	-1	-1	1

Modulus 12

	-1	1	5	7
(1,)	1	1	1	1
(5,)	-1	1	-1	1
(7,)	-1	1	1	-1
(11,)	1	1	-1	-1

Modulus 13

	-1	1	2	3	4	5	6	7	8	9	10	11
(1,)	1	1	1	1	1	1	1	1	1	1	1	1
(2,)	-1	1	e(1/12)	e(1/3)	e(1/6)	-i	e(5/12)	e(11/12)	i	e(2/3)	e(5/6)	e(7/12)
(3,)	1	1	e(1/3)	e(1/3)	e(2/3)	1	e(2/3)	e(2/3)	1	e(2/3)	e(1/3)	e(1/3)
(4,)	1	1	e(1/6)	e(2/3)	e(1/3)	-1	e(5/6)	e(5/6)	-1	e(1/3)	e(2/3)	e(1/6)
(5,)	-1	1	-i	1	-1	-i	-i	i	i	1	-1	i
(6,)	-1	1	e(5/12)	e(2/3)	e(5/6)	-i	e(1/12)	e(7/12)	i	e(1/3)	e(1/6)	e(11/12)
(7,)	-1	1	e(11/12)	e(2/3)	e(5/6)	i	e(7/12)	e(1/12)	-i	e(1/3)	e(1/6)	e(5/12)
(8,)	-1	1	i	1	-1	i	i	-i	-i	1	-1	-i
(9,)	1	1	e(2/3)	e(2/3)	e(1/3)	1	e(1/3)	e(1/3)	1	e(1/3)	e(2/3)	e(2/3)
(10,)	1	1	e(5/6)	e(1/3)	e(2/3)	-1	e(1/6)	e(1/6)	-1	e(2/3)	e(1/3)	e(5/6)
(11,)	-1	1	e(7/12)	e(1/3)	e(1/6)	i	e(11/12)	e(5/12)	-i	e(2/3)	e(5/6)	e(1/12)
(12,)	1	1	-1	1	1	-1	-1	-1	-1	1	1	-1