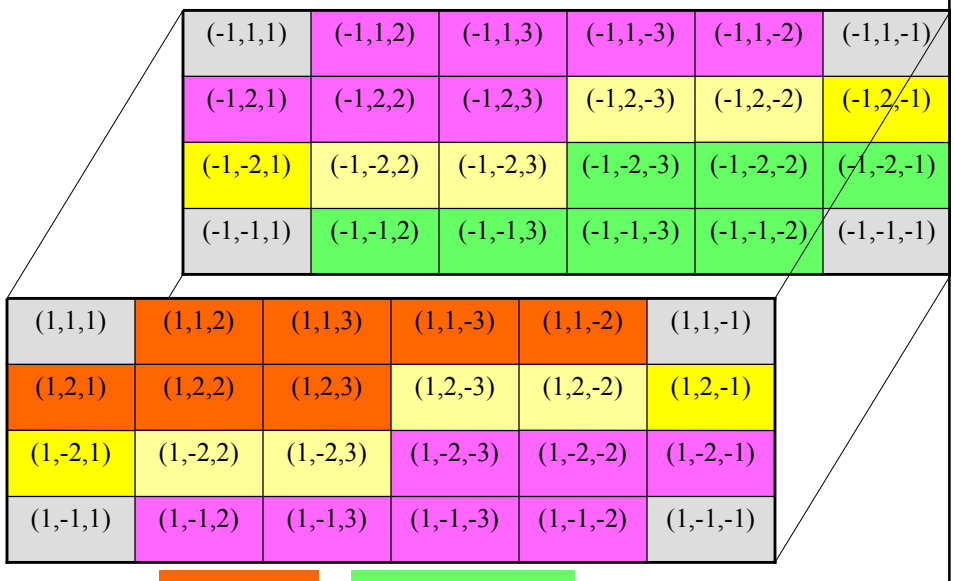
Example: $n = 35$.

(1,1)	(1,2)	(1,3)	(1,-3)	(1,-2)	(1,-1)
(2,1)	(2,2)	(2,3)	(2,-3)	(2,-2)	(2,-1)
(-2,1)	(-2,2)	(-2,3)	(-2,-3)	(-2,-2)	(-2,-1)
(-1,1)	(-1,2)	(-1,3)	(-1,-3)	(-1,-2)	(-1,-1)

basis via relation (S)

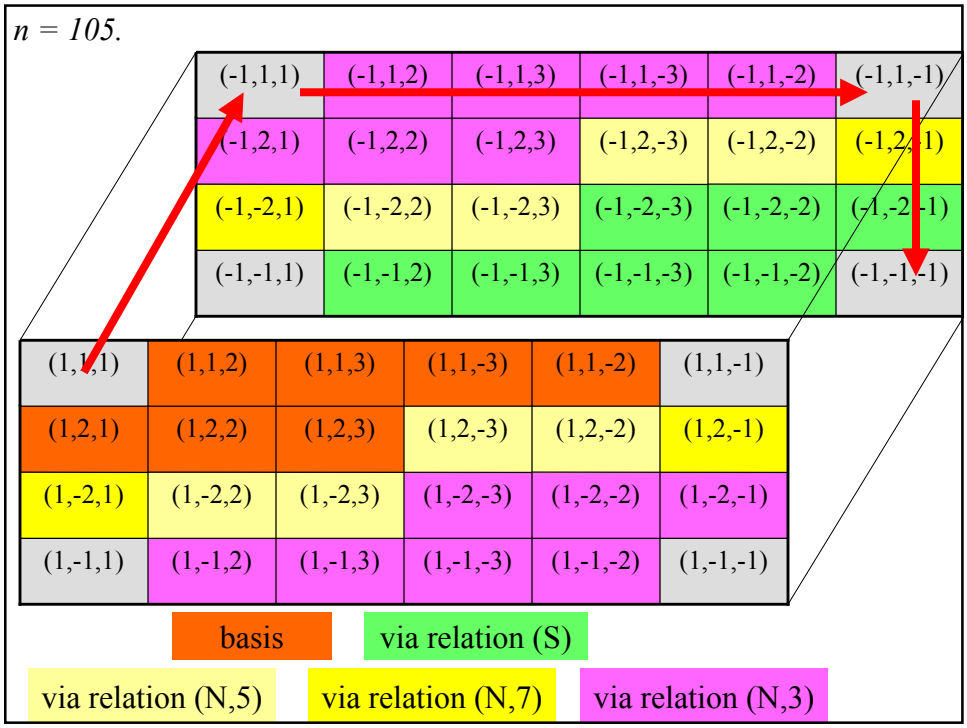
via relation (N,5) via relation (N,7)

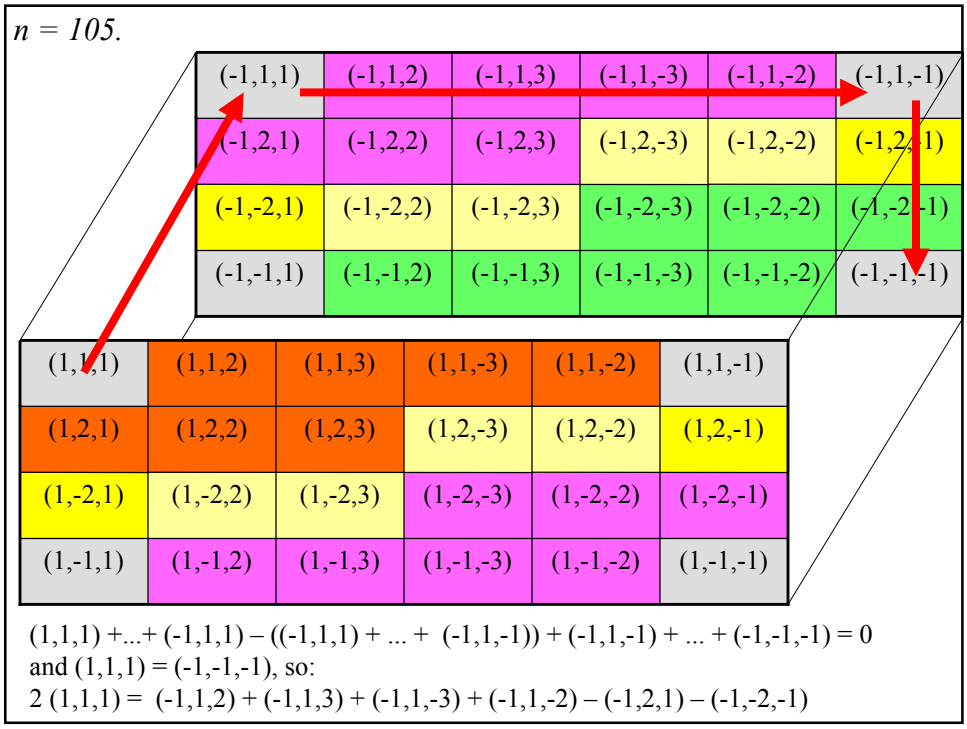
$n = 105$.



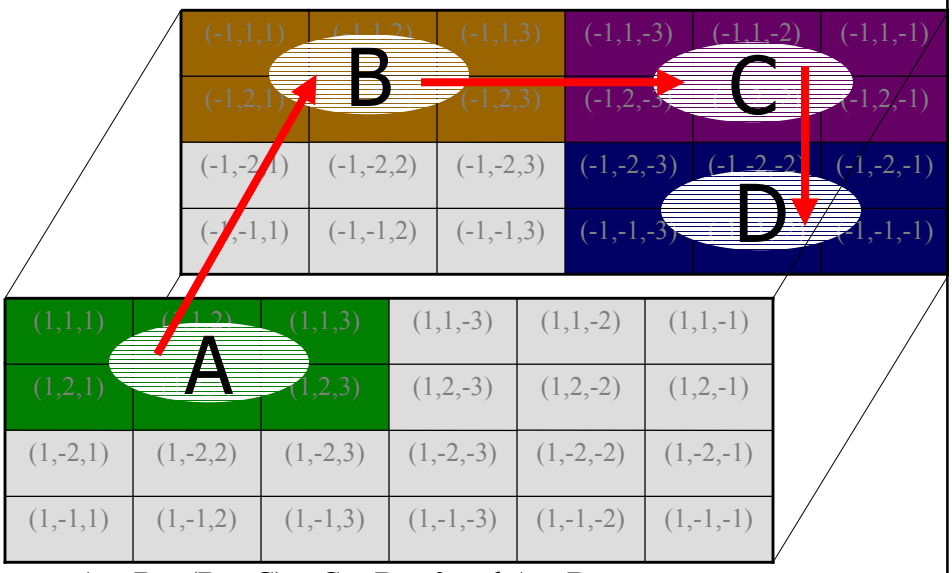
basis via relation (S)

via relation (N,5) via relation (N,7) via relation (N,3)


n = 105.
(-1,1,1) (-1,1,2) (-1,1,3) (-1,1,-3) (-1,1,-2) (-1,1,-1)
(-1,2,1) (-1,2,2) (-1,2,3) (-1,2,-3) (-1,2,-2) (-1,2,-1)
(-1,-2,1) (-1,-2,2) (-1,-2,3) (-1,-2,-3) (-1,-2,-2) (-1,-2,-1)
(-1,-1,1) (-1,-1,2) (-1,-1,3) (-1,-1,-3) (-1,-1,-2) (-1,-1,-1)
(1,1,1) (1,1,2) (1,1,3) (1,1,-3) (1,1,-2) (1,1,-1)
(1,2,1) (1,2,2) (1,2,3) (1,2,-3) (1,2,-2) (1,2,-1)
(1,-2,1) (1,-2,2) (1,-2,3) (1,-2,-3) (1,-2,-2) (1,-2,-1)
(1,-1,1) (1,-1,2) (1,-1,3) (1,-1,-3) (1,-1,-2) (1,-1,-1)
basis
via relation (S)
via relation (N,5)
via relation (N,7)
via relation (N,3)


n = 105.
(-1,1,1) (-1,1,2) (-1,1,3) (-1,1,-3) (-1,1,-2) (-1,1,-1)
(-1,2,1) (-1,2,2) (-1,2,3) (-1,2,-3) (-1,2,-2) (-1,2,-1)
(-1,-2,1) (-1,-2,2) (-1,-2,3) (-1,-2,-3) (-1,-2,-2) (-1,-2,-1)
(-1,-1,1) (-1,-1,2) (-1,-1,3) (-1,-1,-3) (-1,-1,-2) (-1,-1,-1)
(1,1,1) (1,1,2) (1,1,3) (1,1,-3) (1,1,-2) (1,1,-1)
(1,2,1) (1,2,2) (1,2,3) (1,2,-3) (1,2,-2) (1,2,-1)
(1,-2,1) (1,-2,2) (1,-2,3) (1,-2,-3) (1,-2,-2) (1,-2,-1)
(1,-1,1) (1,-1,2) (1,-1,3) (1,-1,-3) (1,-1,-2) (1,-1,-1)
(1,1,1) +...+ (-1,1,1) – ((-1,1,1) + ... + (-1,1,-1)) + (-1,1,-1) + ... + (-1,-1,-1) = 0
and (1,1,1) = (-1,-1,-1), so:
2 (1,1,1) = (-1,1,2) + (-1,1,3) + (-1,1,-3) + (-1,1,-2) – (-1,2,1) – (-1,-2,-1)

n = 105.



A + B – (B + C) + C + D = 0 and A = D, so:

2A = 0, i.e. A = 0, therefore:

(1,1,1) = - ((1,1,2) + (1,1,3) + (1,2,1) + (1,2,2) + (1,2,3))