$3 \times 4 \times 2$

y layer, z layer, x layer (legend sketch)
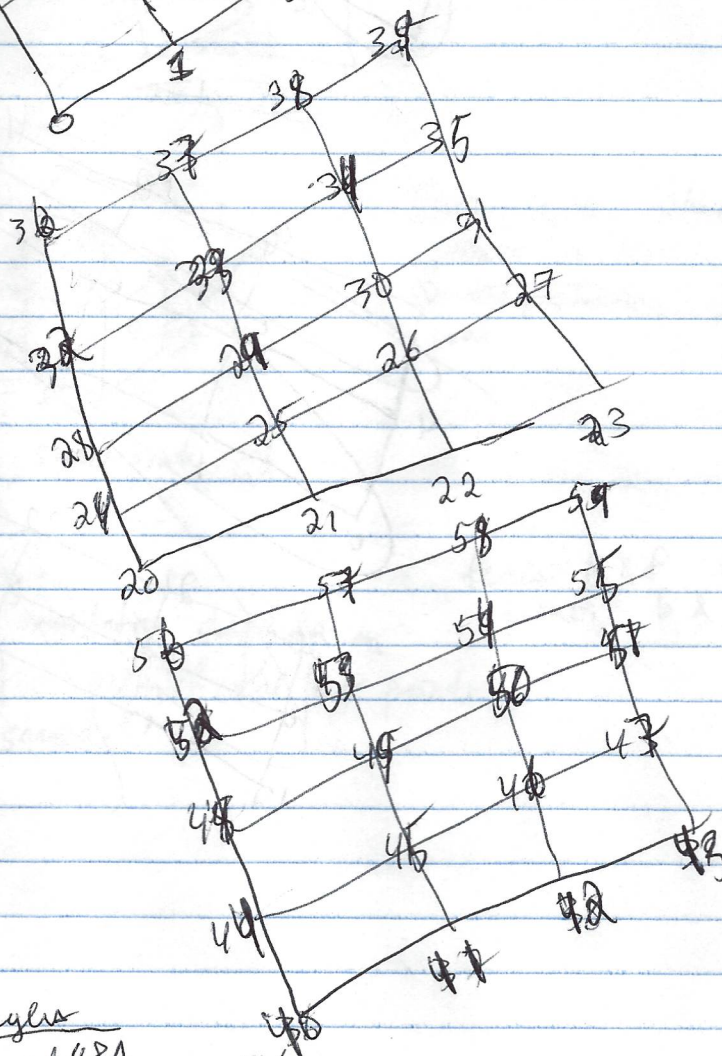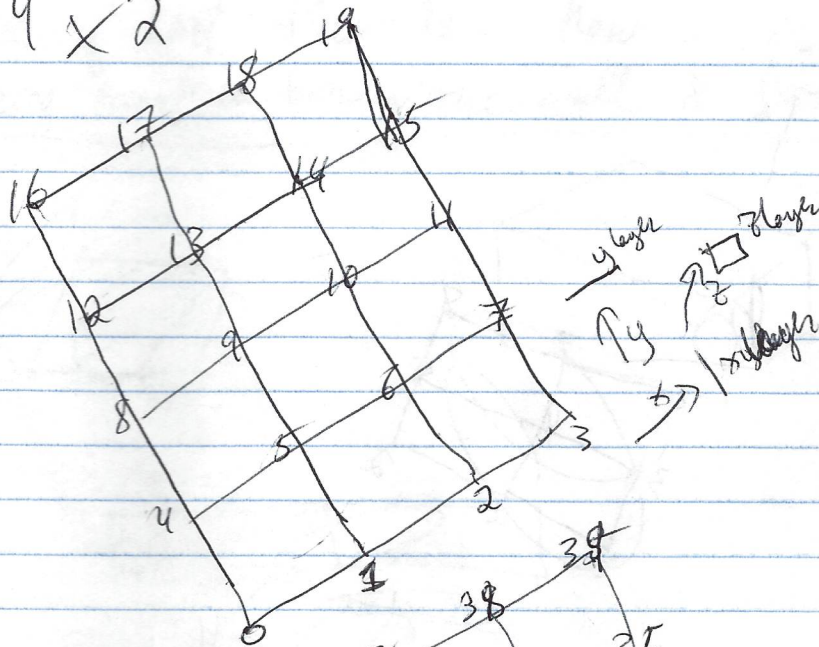
$(0, 4, 5, 1)$ z layer

$(0, 1, 21, 20)$ y layer

$(0, 20, 24, 4)$ x layer

z layers
1&B and 48c

or 18D and 28C

went, also can share with layers above & below.

18down   38B and 48a

or 28a and 38d

y layers
38B and 48A

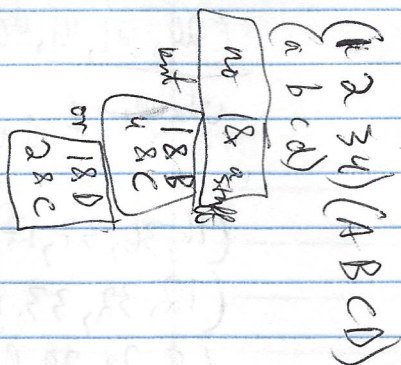or 28A and 38D

up&down   28a and 38d

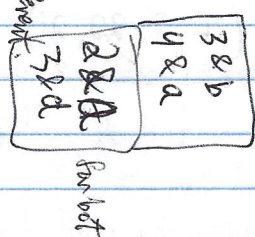or 38b and 48a

z layers
18d and 28c and 28A and 38D

or 18b and 48c and 38B and 48A

Shared points left to right

→ (35, 39, 57, 55)
↑ (34, 38, 58, 54)
↑ (33, 37, 57, 53)
↓ (32, 52, 56, 36)

(31, 35, 55, 51)
(30, 34, 54, 50)
(29, 33, 53, 49)
(28, 48, 52, 32)

(27, 31, 51, 47)
(26, 30, 50, 46)
(25, 29, 49, 45)
(24, 44, 48, 29) ← different

(23, 27, 47, 43)
(22, 26, 46, 42)
(21, 25, 45, 41)
(20, 40, 44, 24) ← different 3rd

X layers
z = 1 to 2

pointing directions

⊤ (15, 19, 39, 35)
⊤ (14, 18, 38, 34)
↑ (13, 17, 37, 33)
← (12, 32, 36, 16)

(11, 15, 35, 31)
(10, 14, 34, 30)
(9, 13, 33, 29)
(8, 28, 32, 12)

(7, 11, 31, 27)
(6, 10, 30, 26)
(5, 9, 29, 25)
(4, 24, 28, 8)

(3, 7, 27, 23) ← not different even though 3
    boundaries
(2, 6, 26, 22)
(1, 5, 25, 21) ← order switched
(0, 20, 24, 4) ← different because
    different boundary
    → mistake? internal fields?
    whether is z points
    in a different direction.

X layer
z = 0 to 1

probably why got outer
↑ field lines
    directions the right?
    Checks are & frequently true?

(1 2 3 4) (A B C D)
(a b c d)

no 1 & 4 entry
    1 & B
    but 4 & C
or 1 & D
    2 & C

3 & b
4 & a   for bot

2 & A

z layer z=0

(16,17,13)
(8,13,13,9)
(4,8,9,5)
(0,4,5,1)
(13,17,18,14)
(9,13,14,10)
(5,9,10,6)
(1,5,6,2)
(14,18,19,15) down
(10,14,15,11) down
(6,10,11,7) down
(2,6,7,3) down   direction

except bot patch.

(1 2 3 4)(ABCD)

| 1&b | 4&c |
| a b c d |
| 3&B | 4&A |

z layer z=1

(32,33,37,36)
(30,21,25,34)
(34,35,29,28)
(38,39,33,32)
(33,34,38,37)
(29,30,34,33)
(25,26,30,29)
(21,22,26,25)
(34,35,39,38) up
(30,31,35,34) up
(26,27,31,30) up
(22,23,27,26) up

(1 2 3 4)(ABCD)

| a |
| 2&B A |
| 3&D |

z layer z=2

(52,53,57,56)
(48,49,53,52)
(44,45,49,48)
(40,41,45,44)
(53,54,58,57)
(49,50,54,53)
(45,46,50,49)
(41,42,46,45)
(54,55,59,58)
(50,51,55,54)
(46,47,51,50)
(42,43,47,46)

shared points left to right

direction

| 1 2 3 4 |
| a b c d |
| 2&a d |

| 2&a |
| 3&d |
| 3&b |
| 4&a |

(36,56,57,37) (37,57,58,38) (38,58,59,39)↑
(32,52,53,33) (33,53,54,34) (34,54,55,35)↑
(28,48,49,29) (29,49,50,30) (30,50,51,31)↑
(24,44,45,25) (25,45,46,26) (26,46,47,27)↑
(20,21,41,40) (21,22,42,41) (22,23,43,42)↓

direction

(1 2 3 4)(ABCD)
(a b c d)

no 1&a stuff

shared but
3&B
4&A

y layer z=1 to 2

(16,36,37,17) (17,37,38,18) (18,38,39,19)↑
(12,32,33,13) (13,33,34,14) (14,34,35,15)↑
(8,28,29,9)   (9,29,30,10)   (10,30,31,11)↑
(4,24,25,5)   (5,25,26,6)   (6,26,27,7)↑
(0,1,21,20)   (1,2,22,21)   (2,3,23,22)↓

direction   left to right

| 2&A |
| 3&D |

y layer z=0 to 1