

#flo #disorganized #inclass

1 | chapter :clap: review

clap

KBxGroupAndMatricesIntro

field: group with + and *
 eg. complex #, real #
 F: field -- usually real and/or complex

don't need to worry about distributivity!
 we are gonna use a lotta fields and not a lot of groups
 figure it out in low d then just apply to high d
 addition -> commutative in f1, extrapolate to fn

inherited commutativity!

3d vis on 2d means losing info, thus point has a line of points that all fall there
 additive and multiplicative identity need to be separate!
 any group with zero will not be groups under *! $Q^* = (Q \setminus \{0\}, *)$ pluck out zero

1.0.1 | associativity check, with integers!

let $a, b, c \in \mathbb{Z}$
 goal: $a + (b + c) = (a + b) + c$
 $a + (b + c) = (1 + 1 + 1 + 1 + \dots + 1) = (1 + 1 + 1 + 1 + \dots + 1) + (1 + 1 + 1 + 1 + \dots + 1) + (1 + 1 + 1 + 1 + \dots + 1)$
 and then scoot over?
 #review

1.0.2 | * 3x1 matrices

- equal indices

no * everything by 1 cuz $a_i \neq i_a$:(
 dot and cross product