#flo #disorganized #inclass

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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 aplly to high d
addition -> commutative in f1, extrapolate to fn

```
inhereted comutitivity!
```

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\0}, *) pluck out zero

1.0.1 | associativity check, with integers!

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

1.0.2 | * 3x1 matrices

- equal indicies

no * everything by 1 cus ai !+ ia :(
dot and cross product