

**Source:** 2020MATH530/KBe2020math530floIndex.md

#flo #disorganized #incomplete

## 1 | Administrative bits

- Will present problems from 2.B and/or 2.C next week
  - Mini quiz, stop yourself after an hour
  - and give your subconscious a chance to think about things # #icr Axler2.C ## Polynomials are vectors
    - because you can add and scale them and they are kind of nice in general ## The box under 2.38
  - You can't understand a vector space just by knowing the vectors inside
    - you also need to know the field that you are in
    - See 2.A ex5
  - The field that you are over changes your dimension: usually we think of  $\mathbb{C}$  as a vector space over  $\mathbb{R}$ , but in this class we think of it as over  $\mathbb{C}$ , which means  $\dim \mathbb{C} = 1$
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