1 | Why columns (not rows)?

1.1 | Because columns map to input, while rows map to output

1.2 | Linear dependence is going to have more to do with the columns

1.3 | Dot products are ”linear combinations” of the columns

1.4 | It’s only because we usually multiply with variables on the right. When we go backwards, then we care about the row.

2 | #definiton column space definition

The subpsace that gets hit by inputs.

3 | Row vs Column linear dependency

3.1 | Under what circumstances is it true that row linear independence iff column linear independence?

3.1.1 | maybe in square matrices?