Attending Section

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1 Goals

The goals of this activity are:

1. To gives students an understanding of what section will be like.
2. To learn about spanning sets, and in particular to learn how to find spanning sets from equations determining a subspace.
3. To relate the new words they are learning to the various sneaky mathematicians activity.

2 Materials

For this activity you will need:

1. Handouts consisting of section problems

3 Instructions

This activity will take approximately 60 minutes. This activity is meant to mimic section, so different instructors might have different styles. One way of running section is considered below.

1. Group students into pairs, give students handouts (section-style worksheets), and explain the goals of the activity. Emphasize that there is no expectation that they solve all the problems on the handouts.
2. In typical section style, spend the first 10 minutes re-explaining the important concepts from lecture (span, subspace,and dimension). Take questions.
3. Ask students work in pairs, and give them approximately 5 minutes to try each problem.
4. At the end of this time, explain the solution to each problem.

4 Tips

1. An alternative way to run section is to ask students to work on problems they think are hardest for them (so people start on different problems) and go around helping them individually. Solutions needn't be explained to the class—unless many people are stuck on the same problem.

2. It is unlikely there will be enough time to solve all the problems in the handout, but this is meant to be representative of how section functions.

3. There are two methods to show something is a subspace. You can either show it is the span of some set of vectors, or show that it is closed under addition and scalar multiplication.