

Last name \_\_\_\_\_

First name \_\_\_\_\_

**LARSON—MATH 511—HOMEWORK WORKSHEET 02**  
**Notes and Questions**

1. Read Sec. 1.1 of our book.
2. Watch Prof Strang's lecture "The Column Space of  $A$  Contains All Vectors  $Ax$ ":  
<https://ocw.mit.edu/courses/18-065-matrix-methods-in-data-analysis-signal-processing-and-machine-learning-spring-2018/resources/lecture-2-multiplying-and-factoring-matrices/>
3. Write up *useful notes* for Prof Strang's lecture.
4. Write at least two questions about what you didn't understand. Write these maximally clearly—so that an advanced student (who has had a semester of linear algebra) *not* in our class might understand your question.  
  
Is your question about a definition of a term that he uses? If so, is the term defined in our book? Write out the relevant definition and an example.
5. Your **Notes and Questions** can be handwritten, done in  $\text{\LaTeX}$ , WORD, etc, but you need to make a **pdf** of your final product (somehow).
6. Then email me your notes with an email subject that mentions the class and assignment (for instance, "MATH 511 h02 attached").

**More**

All of Prof Strang's course lectures are here:

[https://ocw.mit.edu/courses/18-065-matrix-methods-in-data-analysis-signal-processing-and-machine-learning-spring-2018/video\\_galleries/video-lectures/](https://ocw.mit.edu/courses/18-065-matrix-methods-in-data-analysis-signal-processing-and-machine-learning-spring-2018/video_galleries/video-lectures/)