Homework 5
Due 7/30

- FIS denotes the course textbook.

- Do not simply copy your answers from your classmates or the internet. You'll learn nothing from this. You will fail your quizzes and exams.

- You are encouraged to work with your classmates. Your answers should reflect your own work and understanding.

1. Read 3.3 and 3.4 carefully

2. (FIS 3.2) 6(b,e), 11, 14

3. (FIS 3.3) 2(c,d), 3(c,d)

4. (BONUS!! You don't have to turn this in.) Let $V = \mathbf{R}^n$ for some n. Let $A = \{a_1, \ldots, a_k\}$ and $B = \{b_1, \ldots, b_l\}$ be linearly independent sets. Let X be spanned by A and Y be spanned by B. Give an algorithm that computes a basis for $X \cap Y$.

   Hint: You can check your method agaisnt Problem 5 here: `http://kevinlui.org/wi18m308/exams/au17_midterm2sol.pdf`