18.06 Spring 2013 – Problem Set 9

This problem set is due Thursday, May 2nd, 2013 at 4pm (hand in to Room 2-255). The textbook problems are out of the 4th edition. A correct answer will only earn you half of the available points. The other half of the points come from your explanation.

Note: Your recitation instructor is responsible for allowing late homework submissions, as well as the re-grading of your PSet. If there is any problem with your PSet, contact your recitation instructor!

1. (10 pts) Do Problem 4 from Section 6.6.
2. (10 pts) Do Problem 6 from Section 6.6.
3. (10 pts) Do Problem 17 from Section 6.6.
4. (10 pts) Do Problem 18 from Section 6.6.
5. (10 pts) Do Problem 20 from Section 6.6.
6. (10 pts) Do Problem 3 from Section 6.7.
7. (10 pts) Do Problem 6 from Section 6.7.
8. (10 pts) Do Problem 7 from Section 6.7.
9. (10 pts) Do Problem 14 from Section 6.7.
10. (10 pts) For which matrices is Σ in the SVD the same as the eigenvalue matrix Λ in diagonalization ?