

Assignment #6, CSE 191
Fall, 2014

General Guidelines:

This assignment will NOT be collected, nor graded. However, you should carefully complete it as if it were to be graded. There will be a quiz based on this assignment (with very similar problems) during the week Oct 27 - 31.

The solution will be posted on Friday, Oct. 24.

Note: For problems involving counting, your solution MUST indicate how do you get the answer (such as $C(8, 4) \cdot 3!$, $P(5, 2) \cdot 2^3$.) This requirement will also apply to the quiz and midterm questions. You do NOT have to give a numerical answer.

1. (0 points). Page 396, Prob 4.
2. (0 points). Page 396, Prob 16.
3. (0 points). Page 396, Prob 22, (d), (e), (f)
4. (0 points). Page 397, Prob 46, (a), (b), (c)
5. (0 points). Page 405, Prob 4.
6. (0 points). Page 406, Prob 38.
7. (0 points). Page 413, Prob 4.
8. (0 points). Page 413, Prob 5, (b) (d)
9. (0 points). Page 413, Prob 6, (b) (c)
10. (0 points). Page 413, Prob 12.
11. (0 points). Page 413, Prob 18.
12. (0 points). Page 414, Prob 22, (d) (e) (f).
13. (0 points). Page 414, Prob 26.
14. (0 points). Page 421, Prob 8.
15. (0 points). Page 421, Prob 12.
16. (0 points). Page 422, Prob 22.
17. (0 points). Page 422, Prob 33.
18. (0 points). There are 8 students trying to solve 8 problems. Each problem is solved by at least 5 students. Prove that there exist two students such that every problem is solved by at least one of them.

The easiest way to prove it is perhaps by using Pigeonhole Principle. But you can prove it by any other method that works.