

Section covered

- 1.1, 1.2, 1.3 (except Graphic Sequences) and 1.4.
2.1 (except Disjoint Spanning Trees) 2.2 (only Enumeration of Trees).
3.1 (except Dominating Sets).

Theorems

You will asked to prove one these theorem. If the theorem has a name, you may also be asked to state the theorem.

1. Propostion (1.1.24)
2. Theorem (1.2.18)
3. Theorem (1.2.23)
4. Theorem (1.2.26)
5. Degree-Sum Formula (1.3.3)
6. Theorem (1.3.19)
7. Theorem (1.3.23)
8. Proposition (1.4.30)
9. Theorem (2.1.4)
10. Proposition (2.1.8)
11. Cayley's Formula (2.2.3)
12. Theorem (3.1.10)
13. Hall's Theorem (3.1.11)
14. Theorem (3.1.16)

Outline of the Midterm

The problems will be of one the following types:

1. Definitions (Similar to quizzes)
2. Theorem (from the list above)
3. True-False where you have come up with a short argument or a counter example.
4. Practical Problems, where you have to apply theorems and algorithms we have learned in an specific example.
5. Proof Problems.