

CS-228, Discrete Structures II
Spring 2008, Section 1

Homework Assignments

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NOTE: *Unless stated otherwise, all assigned problems come from the course textbook (Susanna S. Epp's "Discrete Mathematics with Applications. Third Edition.")*

Assignment 1:

Counting; Multiplication Rule; Addition Rule:

READING:

Epp's sections 6.1 through 6.3 (pages 297-330).

DELIVERABLE:

Section 6.1: Exercises 2, 3, 5, 7, 9, 11, 13, 16, 18, 21, 28, and 31 (pages 304-306).

Section 6.2: Exercises 1, 3, 4, 6, 8, 9, 11, 19, 21, 24, 31, and 32 (pages 318-320).

Section 6.3: Exercises 1, 3, 4, 6, 9, 11, 12, 14, 24, 28, and 30 (pages 330-333).

Assignment 2:

Combinations; Permutations; Binomial Theorem:

READING:

Epp's sections 6.4 through 6.7 (pages 334-369).

DELIVERABLE:

Section 6.4: Exercises 1, 3, 6, 15, and 19 (pages 347-349).

Section 6.5: Exercises 1, 3, 5, 10, and 11 (pages 355-356).

Section 6.6: Exercises 1, 3, 5, 6, and 9 (pages 361-362).

Section 6.7: Exercises 1, 3, 5, 7, 11, 13, 15, 24, 26, 28, 32, and 34 (pages 369-370).

Assignment 3:

Expected Value; Conditional Probability; Independence:

READING:

Epp's sections 6.8 through 6.9 (pages 362-385).

DELIVERABLE:

Section 6.8: Exercises 1, 2, 4, 7, 14, 16, and 19 (pages 374-375).

Section 6.9: Exercises 1, 4, 5, 10, 13, 16, 18, 21, and 23 (pages 386-388).

Assignment 4:

Set Identities; Boolean Algebra; and Logic Circuits:

READING:

Epp's sections 5.1 through 5.3 (pages 255-290).

DELIVERABLE:

Section 5.1: Exercises 1, 4a,c,d, 5, 6, 7, 8, 9, 16, 23, 26, and 31 (pages 267-269).

Section 5.2: Exercises 8, 10, 11, 12, 15, 16, 18, 19, 23, 25, 27, and 32 (pages 280-282).

Section 5.3: Exercises 1, 3, 5, 6, 9, 11, 13, 14, and 15, (pages 290-293).

Assignment 5:

READING:

Epp's sections 11.1 and 11.2 (pages 649-662 and 665-679).

DELIVERABLE:

Section 11.1: Exercises 1, 3, 5, 12, 14, 15, 16, 19, 22, and 28 (pages 662-665).

Section 11.2: Exercises 1, 4, 5, and 8 (pages 679-683).

Assignment 6:

READING:

Epp's sections 11.3 and 11.4 (pages 683-695 and 697-703).

DELIVERABLE:

Section 11.3: Exercises 1-10 and 19 (pages 695-697).

Section 11.4: Exercises 1-5, 7, 9, and 11 (pages 703-704).

Assignment 7:

READING:

Epp's sections 11.5 and 11.6 (pages 705-721 and 723-731).

DELIVERABLE:

Section 11.5: Exercises 1, 4, 7, 15-20, and 43-47 (pages 721-722).

Section 11.6: Exercises 4, 6, 10, and 11 (pages 732-733).