

I am grateful to Bryan Gingras for supplying the following information to our class:

Please make any corrections that you notice and forward to me.

1.1 #10 in 6th Edition corresponds to 1.1 #14 in 7th edition

1.1 #26 == 1.1 #30

1.1 #34 == 1.1 #38

1.1 #38 == 1.1 #44

1.1 #46 is not in the 7th edition

The questions from section 1.2 in the 6th edition are in section 1.3 of the 7th edition. Section 1.2 in the 7th edition is "Applications of Propositional Logic".

Section 1.3 (predicates and quantifiers) in the 6th edition is Section 1.4 in the 7th edition. Section 1.3 in the 7th edition is Propositional Equivalences.

1.3 #12 == 1.4 #12

1.3 #20 == 1.4 #20

1.3 #24 == 1.4 #24

1.3 #44 == 1.4 #44

1.3 #50 == 1.4 #50

1.3 #52 == 1.4 #52

The questions from Sections 1.4 and 1.5 in the 6th edition are the same as Sections 1.5 and 1.6 (respectively) in the 7th edition.

Question 22 from Section 2.1 in the 6th edition is Question 24 from Section 2.1 in the 7th edition.

Question 30 from Section 2.1 in the 6th edition is Question 38 from Section 2.1 in the 7th edition.

Question 32 from Section 2.1 in the 6th edition is Question 40 from Section 2.1 in the 7th edition.

The questions from Section 2.2 in both editions are identical.

Section 2.3, #40 in the 6th edition corresponds to 2.3 #44 in the 7th edition
Section 2.3, #48 in the 6th edition corresponds to 2.3 #52 in the 7th edition
Section 2.3, #64 in the 6th edition corresponds to 2.3 #68 in the 7th edition
Section 2.3, #70 in the 6th edition corresponds to 2.3 #74 in the 7th edition

Section 2.4, #16ab in the 6th edition corresponds to 2.4 #32ab in the 7th edition
Section 2.4, #18ab in the 6th edition corresponds to 2.4 #34ab in the 7th edition
Section 2.4, #32 in the 6th edition corresponds to 2.4 #2abdf in the 7th edition
Section 2.4, #42 in the 6th edition corresponds to 2.5 #28 in the 7th edition

Section 3.1 in the 6th edition is the same as in the 7th edition

Section 3.2 #2, #4, #8, #18 in the 6th edition are the same as in the 7th edition
Section 3.2 #20 in the 6th edition corresponds to 3.2 #27 in the 7th edition
Section 3.2 #24 in the 6th edition corresponds to 3.2 #30 in the 7th edition (worded differently, keep in mind that if $f(x)$ is of the same order as $g(x)$, then f is $\Theta(g)$)

Section 3.3 #12 and 22 from the 6th edition do not appear to be in the 7th edition

Section 3.3 #12:

Determine the least number of comparisons, or best-case performance, a) required to find the maximum of a sequence of n integers, using Algorithm 1 from Section 3.1.

- b) used to locate an element in a list of n terms with a linear search.
- c) used to locate an element in a list of n terms using a binary search.

Section 3.3 #22

Determine the worst-case complexity in terms of comparisons of the algorithm from Exercise 5 in Section 3.1 for determining all values that occur more than once in a list of sorted integers.

Section 3.4 #6 from the 6th edition corresponds to Section 4.1 #6 in the 7th edition.

Section 3.4 #8 from the 6th edition corresponds to Section 4.1 #8 in the 7th edition.

Section 3.4 #24 from the 6th edition corresponds to Section 4.1 #24 in the 7th edition.

Section 3.4 #28 from the 6th edition corresponds to Section 4.5 #6 in the 7th edition.

Section 3.5 #20ab from the 6th edition corresponds to Section 4.3 #24ab in the 7th edition.

Section 3.5 #26 from the 6th edition corresponds to Section 4.3 #30 in the 7th edition.

Section 3.5 #28 from the 6th edition corresponds to Section 4.3 #46 in the 7th edition.

Section 3.7 #2be does not appear to be in the 7th edition.

Section 3.7 #6 corresponds to Section 4.4 #4 in the 7th edition.

Section 3.7 #12 corresponds to Section 4.4 #10 in the 7th edition (ignore "using the inverse of 2 modulo 7 found in part (a) of exercise 6").

Section 3.7 #18 does not appear to be in the 7th edition.

Section 3.7 #26 corresponds to Section 4.4 #32 in the 7th edition.

Section 3.7 #52 corresponds to Section 4.4 #58 in the 7th edition.

Section 3.7 #2be

Express the greatest common divisor of each of these pairs of integers as a linear combination of these integers.

b) 33, 44

e) 101, 203

Section 3.7 #18

$$x \equiv 2 \pmod{3}$$

$$x \equiv 1 \pmod{4}$$

$$x \equiv 3 \pmod{5}$$