# CS 3233 Discrete Mathematical Structures - Fall 04 

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9 / 13 / 04
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## 3. Homework Due Monday $9 / 27 / 04$ before class

1. 1.7 (p. 94)
(a) (2 points) $2 \mathrm{a}, \mathrm{b}$
(b) (1 point) 12 a
(c) (1 point) 22 a
2. 1.8 (p. 108)
(a) (3 points) $6 \mathrm{a}, \mathrm{b}, \mathrm{d}$
(b) (4 points) Determine which of the functions in $12 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$ are one-to-one, onto, or both. Justify your answers.
(c) (4 points) $16 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$
(d) (2 points) 28
(e) (2 points) $34 \mathrm{a}, \mathrm{b}$
(f) (2 points) 42
3. 2.1 (p. 130)

For both exercises below, give steps $1-5$ to describe the algorithm.
(a) $(5$ points $) 4$
(b) (5 points) 5

