

## Recommended Questions - Weeks 1 & 2

### Directions

These are recommended questions from week 1 and 2 of the course. The questions are from section handouts, and the Rosen and Velleman textbooks. Try to solve these problems on your own before asking for help or looking at solutions. Note: solutions to section handouts are posted online and solutions to some of the book problems can be found in the back of the textbooks. Page numbers for the 7th edition of Rosen and Velleman are also listed in parentheses beside the questions.

### Propositional Logic

**Section:** ([Section 1](#)) Translations , ([Section 2](#)) Teatime

**Rosen:** 1.1.13 - 1.1.14 (13-14), 1.2.1 - 1.2.6 (22), 1.2.8 (22)

**Velleman:** 1.1.5 - 1.1.6 (14), 1.5.1 - 1.5.3 (53-54)

### Logical Equivalences

**Section:** ([Section 2](#)) Equivalences part (b)

**Rosen:** 1.3.11 - 1.3.12 (35), 1.3.22 - 1.3.28 (35), 1.3.30 (35)

**Velleman:** 1.2.8 - 1.2.9 (without truth tables) (24), 1.5.5 - 1.5.7 (54)

### Boolean Algebra & Canonical Forms

**Section:** ([Section 2](#)) Canonical Forms

**Rosen:** 12.2.3 (822), 12.2.5 (822), 12.2.8 (822), 12.2.11 (822)

### Predicate Logic

**Section:** ([Section 2](#)) Translate to Logic, Positively Different, Translator

**Rosen:** 1.4.9 - 1.4.10 (53), 1.4.23 - 1.4.24 (54), 1.4.32 - 1.4.34 (55), 1.4.40 - 1.4.41 (55), 1.5.8 - 1.5.11 (65), 1.5.30 - 1.5.33 (67), 1.5.36 - 1.5.38 (68)

**Velleman:** 2.1.1 - 2.1.2 (63), 2.1.4 (63), 2.1.6 - 2.1.7 (64)