MAT 511

Homework for week 1

- (1) Section 1.1: 2 ac 3 bfj
 - 6 df 10 abe
- (2) Section 1.2:
 - 1 gh 2 gh 5 de 8 adg
- (3) Prove the distributive law:

 $A \wedge (B \vee C)$ is equivalent to $(A \wedge B) \vee (A \wedge C)$

(4) Define the new binary logical operation NAND by $A \text{ NAND } B = \sim (A \wedge B)$.

Write the truth tables for:

 $A \operatorname{nand} A$ $(A \operatorname{nand} B) \operatorname{nand} (A \operatorname{nand} B)$