

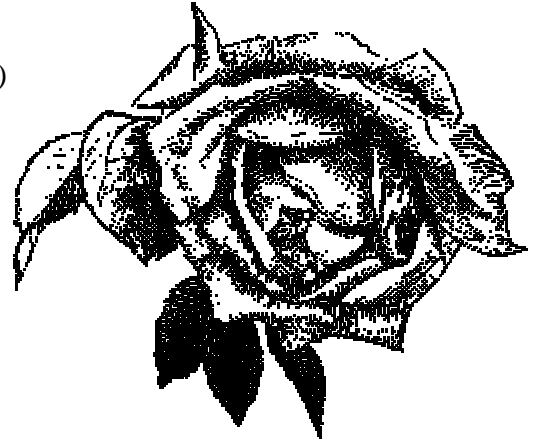
1. Do the Following problems from the book. (5 points each)

Problem 2, page 108

Problem 5 page 109

Problem 10 page 110

For problem 10, use only the algebraic laws and axioms to simplify the expressions.



2. Prove the following equalities using Algebraic rules. Do not use truth tables. Show each step in the derivation, and for each step, list the axiom or theorem used. (4 points)

$$\mathbf{a'b'c' + a'b'c + a'bc' + a'bc + abc' + abc = a' + ab}$$

$$\mathbf{(a+b)(a+b') = a}$$