

Physics 517/617 Homework 7
This HW and ALL LABs DUE:
Friday December 4, 2009 Last Day of Classes

Basic Electronics, Curtis Meyers:

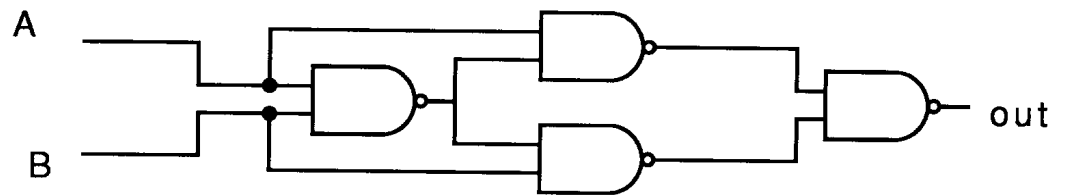
Problems 7-3,7-5,7-13,7-17

Plus the following problems:

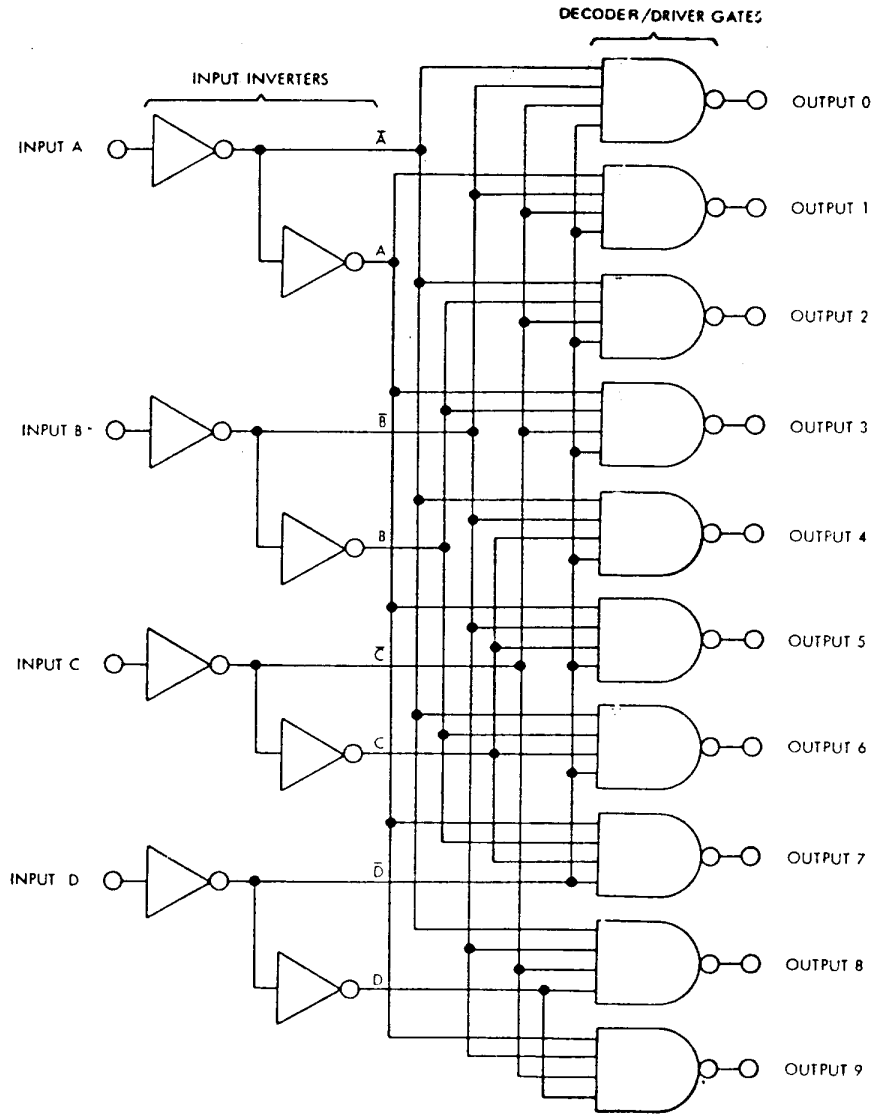
1) Prove the following Boolean algebraic equalities:

- a) $\overline{\overline{A}} = A$
- b) $A + \overline{BC} = (A+B)(A+C)$
- c) $A + \overline{A}B = A + B$
- d) $AB + \overline{A}C = AB + BC + \overline{A}C$
- e) $AB + A\overline{B} + \overline{A}B = A + B$

2) Generate a truth table for the following circuit:



- 3) By generating the truth table show that the following circuit covers a BCD input to a decimal output.



No Additional for Physics 617