

**King Fahd University of Petroleum & Minerals**  
**Department of Electrical Engineering**

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EE200-03            (062)

Homework # 2

1. Find the  $(r-1)$ 's complements of the following numbers:  $(498530)_{10}$ ,  $(A9C.5)_{16}$ ,  $(110110)_2$ , and  $(100000,011)_2$ .
2. Perform the binary subtraction  $110110 - 11101$  using the 2's complement.
3. Represent the signed numbers  $(+75)$  and  $(-52)$  in binary using 8 bits. Then add the two numbers and convert the sum to decimal.
4. Represent the decimal number 482.5 using BCD and 2421 codes.
5. Represent the message " Home Work 2 is due" in ASCII using the hexadecimal representation.