## MAT 116 In-class Problems (\#1) <br> June 21, 2010

1. How many 2-digit numbers are there?
2. How many ways are there to form a 3 -letter word (i.e. sequence) using the letters $A, B, C, D$
(a) with repetitions of letters allowed?
(b) with no repetitions of letters allowed?
(c) with no repetitions of letters allowed and containing the letter $D$ ?
(d) with repetitions of letters allowed and containing the letter $D$ ?
3. How many 5 -digit numbers have repeated digits?
