1. A company generates identification codes for its employees by using two letters followed by a three-digit number.

   (a) How many codes are possible if repeated letters and numbers are allowed?

   (b) How many are possible if they are not?

   (c) How many codes use the same letter twice? (Repeated numbers are allowed also.)

   (d) How many codes use the same digit all three times? (Repeated letters are allowed.)

2. (a) How many 5-letter "words" begin with a consonant followed by 2 vowels?

   (b) How many begin with a consonant and end with a vowel?

   (c) How many begin and end with the same letter?

   (d) How many don't use any vowels?

   (e) How many use at least 1 vowel?