Permutations and Combinations

1. The number of different 8 letters arrangements that can be made from the letters of the word DAUGHTER so that
   (i) All vowels occur together
   (ii) All vowels do not occur together.
2. If $C_2^n = C_3^n$ then $n =$
3. How many chords can be drawn through 5 points on a circle?
4. A bag contains 5 red balls and 3 black balls. Determine the number of ways in which 2 red and 2 black balls can be selected.

LIVEWORKSHEETS