34) Probably the best way to do this is just to break it down into the three cases by sex.

There are \(C(15,6)\) ways to choose the committee to be composed only of women. 
\(C(15,5)\times C(10,1)\) ways if there are to be five women and one man. 
\(C(15,4)\times C(10,2)\) ways if there are to be four women and two men. 

Therefore the answer is: 
\[C(15,6)+C(15,5)C(10,1)+C(15,4)C(10,2) = 5005 + 30030 + 61425 = 96,460.\]

42) Each seating under the rules here corresponds to two seating’s under the original rules, because we can change the order of people around the table from clockwise to counterclockwise. Therefore we need to divide the formula there by 2, giving us \(n!/(2r(n−r)!))\). This assumes that \(r \geq 3\). If \(r = 1\) then the problem is trivial (there are \(n\) choices under both sets of rules). If \(r = 2\), then we do not introduce the extra factor of 2, because clockwise order and counterclockwise order are the same. In this case, both answers are just \(n!/(2(n−2)!))\), which is \(C(n,2)\), as one would expect.