1. The Department of Mathematics at the University of Southwestern North Dakota consists of 21 full-time faculty members. 14 are men and 7 are women. A five-person hiring committee must be selected by the chair. How many committees are possible if it must consist of the following?
(a) Two women and three men.
(b) Any mixture of men and women.
(c) At least one woman.
(d) At least one woman and at least one man.