

CHECKING YOUR PROGRESS: A SELF-TEST

1. Which of the following statements are true about the chi-square test?
 - a. Chi square is a nonparametric test.
 - b. Chi square is a parametric test.
 - c. Chi square is useful with interval scale data.
 - d. Chi square is useful with nominal scale data.
 - e. A restriction on chi square is that no expected frequency should be less than 5.
 - f. Chi square is based on the normal curve distribution.
 - g. The chi-square test on a single categorical variable is called the chi-square test of independence.
 - h. Chi square is a distribution-free test.

2. A sample of Republicans and a sample of Democrats in a large city are asked whether they favor increasing spending for entitlement programs for the elderly. The results are shown here. Is there a difference between Republicans and Democrats on this question?

	Favor	Oppose
Republicans	26	78
Democrats	53	44

3. Three groups of 10 rats each are fed diets suspected to affect problem-solving ability. Then they are tested on a series of problems until all subjects have achieved criterion on at least two problems. The total number of problems solved by the rats in each dietary group is as follows: Group A, 33; Group B, 22; Group C, 25. Assuming that problem-solving ability should be evenly distributed across the groups, do the groups differ?