Chapter 9 .5 extra credit

1. Briefly describe a research study that would use the chi-square test to analyze the data obtained.

2. A sample of 120 married men between 35 and 40 years of age were asked in 1960 the source of their greatest satisfaction in life – their career, their family, or some other activity. A similar sample of 110 married men were asked the same question in 1993. Notice that the two samples -1960 and 1993 – independent (the two samples have different participants), and each person's score can be tallied in one and only one category –career, family, or other. The data collected are given below.

	Career	**Family**	**Other**
Men in 1960	65	42	13
Men in 1993	25	68	17

   a. State the null hypothesis for the study described.
   b. Use Excel to conduct a test of the null hypothesis (p = .05).
   c. Provide an interpretation of your statistical conclusion in part B.

3. An instructor wants to know if the four sections of her test are equally difficult. She calculates the number of errors for each section and finds that her students made 39 errors in Section 1, 15 errors in Section 2, 28 errors in Section 3, and 18 errors in Section 4.

   a. State the null hypothesis for the study described.
   b. Use Excel to conduct a test of the null hypothesis (p = .05).
   c. Provide an interpretation of your statistical conclusion in part B.