1. In a 1993 survey of 50 Education graduates and 50 Social Science graduates, it was found that the Education graduates had a mean starting salary of $22,554 with a standard deviation of $2,225 while the Social Science graduates had a mean starting salary of $20,348 with a standard deviation of $2,375.

(a) Find a point estimate for the difference in average starting salaries for Education and Social Science majors.

(b) Let $\mu_1$ be the population mean starting salary for the Education graduates and let $\mu_2$ be the population mean salary for the Social Science graduates. Find a 95% confidence interval for $\mu_1 - \mu_2$.

(c) Based on the interval in (b), would you be comfortable saying that the mean starting salary for Social Science graduates is less than that for Education graduates? Explain.

2. (a) A Gallup News Release (see http://www.gallup.com/poll/releases/pr031030.asp) reported that in July 1996, 69% of those surveyed supported assisted suicide for terminally ill, while in May 2003, 72% of those surveyed supported assisted suicide for the terminally ill. Assume the 1996 poll surveyed 1103 adult Americans, while the May 2003 poll surveyed 1009 adult Americans. Find a 99% confidence interval for $p_1 - p_2$ where $p_1$ is the proportion of adult Americans supporting assisted suicide in July 1996, and $p_2$ is the proportion of adult Americans supporting assisted suicide in May 2003.

(b) Based on your interval in (a) would you be comfortable in saying that the proportion of adult Americans supporting assisted suicide was higher in May 2003 than in July 1996? Explain.