Researchers in 1985 conjectured that the divorce rate among Vietnam veterans would be higher than the divorce rate in a similar age group in the larger U.S. population. To investigate this claim, they studied a random sample of 2101 Vietnam veterans, and they compared the divorce rate in this sample to the 27% divorce rate among U.S. men aged 30-44 in 1985.

1. Clearly describe the parameter of interest in this study.

2. State the null and alternative hypotheses to be tested, using appropriate symbols.

The sample revealed that 777 of the 2101 Vietnam veterans had been divorced at least once.

3. How many standard deviations above the hypothesized value of .27 is the sample proportion who had been divorced at least once? (Show how you calculate this.)

4. Summarize your conclusion about the researchers’ conjecture.

5. Explain how your conclusion follows from your test result.