Teen smoking A Vermont study published in December 2001 by the American Academy of Pediatrics examined parental influence on teenagers’ decisions to smoke. A group of students who had never smoked were questioned about their parents’ attitudes toward smoking. These students were again questioned two years later to see if they had started smoking. The researchers found that among the 284 students who indicated that their parents disapproved of kids smoking, 54 had become established smokers. Among the 41 students who initially said their parents were lenient about smoking, 11 became smokers. Do these data provide strong evidence that parental attitude influences teenagers’ decisions about smoking?
Answer to Teen smoking $z = -1.17$, $P = .2422$. 

8.49 In the Health ABC study, 595 subjects owned a pet and 1939 subjects did not. Among the pet owners, there were 285 women; 1024 of the non-pet owners were women. Test whether or not, among the entire population of which these subjects are a part, there is an equal proportion of women who do own pets and who do not.
Answer to 8.49 $z = 2.10, \ P = .0360$
8.41 A recent survey of Internet users reported that 18% downloaded music onto their computers. The filing of lawsuits by the recording industry may be a reason why this percent has decreased from the estimate of 29% from a survey taken a year before. Assume that the sample sizes are both 1370. Test whether or not there has been a change in the percent of Internet users who download music. Also, provide a 95% confidence interval for the difference in proportions.
**Answer to 8.41**  \( z = 6.79 \) and \( P < .0001 \). Confidence interval is from \( .0785 \) to \( .1415 \).
8.17 In a study of the relationship between pet ownership and physical activity in older adults, 594 subjects reported that they had owned a pet, while 1939 reported that they did not. Give a 95% confidence interval for the proportion of older adults in this population who are pet owners.
Answer to 8.17 .218 to .251