

SECTION II
Question 21 & 22

Directions: Show all of your work. Indicate clearly the methods you use, because you will be graded on the correctness of your methods as well as on the accuracy of your results and explanations.

21. *Twins*

In 2001, a national vital statistics report indicated that about 3% of all births produced twins. Is the rate of twin births the same among very young mothers? Data from a large city hospital found only seven sets of twins were born to 469 teenage girls. Test an appropriate hypothesis and state your conclusion.

22. *The NFL*

During the 2000 season, the home team won 138 of the 240 regular season National Football League games. Is this strong evidence of a home field advantage in professional football? Test an appropriate hypothesis and state your conclusion.