

Spring Sports

6th – 8th Grade: The U.S. sports industry makes between \$30 and \$40 billion annually! This includes registration fees, equipment, travel, private coaches and other related costs. One way for an individual or a company to earn money is to host events (such as a tournament). Answer the questions to determine just how much money can be earned for an event. Read the facts about an upcoming softball tournament.

Tournament Facts

- A team consists of 12 players
 - Each team pays a \$300 registration fee
 - There are 10 teams registered for the tournament
 - Each team is guaranteed to play 2 games
 - Each field cost \$150 to rent for the day at the local park
 - The local park has 4 softball fields
1. The equation $G = 2n - 1$ where G represents the number of games and n represent the number of teams is used to determine the number of games needed for a double elimination tournament. How many games are needed to complete this tournament? Justify your answer.

 2. Each game lasts 50 minutes and there is a 10-minute break between games. The tournament begins at 9 am. Assume that the host uses all the fields throughout the tournament (as needed). The host claims that the tournament will be done by 3 pm. Do you agree or disagree with the host's claim? Justify your decision.

 3. At the last minute, 4 more teams registered for the tournament. What is the total profit from this one tournament? Justify your answer.
