

Name _____

The Winning Formula: How Athletes Use Probabilities to Succeed

Open-Ended Response Answer Key

1. Another example could be during free throw situations. Before attempting a free throw, basketball players might calculate the probability of making the shot based on their shooting percentage during practice sessions and games. This helps them decide whether to take the shot themselves or pass the ball to a teammate in a better position.
2. Probabilities can help athletes adjust their strategies on the fly by providing insights into their opponents' tendencies and the likelihood of different outcomes. For example, if a tennis player notices that their opponent has a weak backhand, they might focus their shots on that side more frequently, increasing their chances of winning points.
3. Athletes can enhance their understanding of probabilities by studying game footage, analyzing statistics, and working with coaches or analysts who specialize in data analysis. By incorporating probabilities into their training and preparation, athletes can make more informed decisions during competitions.
4. It's crucial for athletes to analyze probabilities because it gives them a strategic advantage over their opponents. While physical skills are important, understanding probabilities allows athletes to anticipate their opponents' moves, make smarter decisions, and adapt their strategies to maximize their chances of success. This comprehensive approach to sports empowers athletes to perform at their best in any situation.

