

Probability

Chapter 21: Probability · Topic 1

Key Concept

Probability is calculated as (number of favourable outcomes) $\div$ (total number of possible outcomes).

For example, the probability of rolling a 4 on a die is $\frac{1}{6}$, since there's one favourable outcome out of six possible outcomes.

An event with probability 0 is impossible, while an event with probability 1 is certain to happen.

Understanding probability helps us make informed decisions and predictions in games, weather forecasting, and everyday situations.

Quick Revision Notes

- Probability measures how likely an event is.
- It ranges from 0 (impossible) to 1 (certain).
- Probability = favourable outcomes $\div$ total outcomes.
- Rolling a 4 on a die has probability $\frac{1}{6}$.
- There's one favourable outcome out of six.
- Probability 0 means impossible.
- Probability 1 means certain.
- Probability helps predictions and decisions.

Practice Questions

- 1 Calculate the probability of rolling an even number on a die.
- 2 Calculate the probability of picking a red ball from 3 red and 2 blue balls.
- 3 Discuss a real-life example of probability.
- 4 Flip a coin 10 times and record the results.
- 5 Explain probability in your own words.
- 6 Solve two probability problems.