



Understanding Independent Events

Today's Standard

HSS.CP.A2 - Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.

Cues	Notes
What are independent events?	Independent events: Two events are independent if the occurrence of one does not affect the occurrence of the other.
How to determine if events are independent?	Determining independence: If the probability of A and B occurring together is the product of their individual probabilities, then A and B are independent.
Common misconceptions about independent events	Misconceptions: 1) Frequent co-occurrence implies dependence. 2) Independent events cannot occur together.

Summary

Independent events occur without affecting each other's probabilities. If $P(A \text{ and } B) = P(A) * P(B)$, then A and B are independent. Common misconceptions include mistaking frequent co-occurrence for dependence and believing independent events cannot occur together.