



Expected Value Calculation

Today's Standard

HSS.MD.A2 - (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.

Real-World Applications for this Standard

Predicting average outcomes in gambling games; Estimating insurance premiums; Forecasting stock market returns; Evaluating risk in business decisions; Determining average scores in standardized tests

Today I Learned

Today, we learned about expected value, which is like finding the average of all possible outcomes in a situation where you don't know what will happen. It's a way to predict what might happen on average.

Common Stumbling Blocks

Some students might think that the expected value is always a number they can actually get, but it's more like an average number. Others might think it's the most likely outcome, but it's actually the mean of all possible outcomes.

Quiz Me

- What is expected value?
- How do you find the expected value?
- Is the expected value always a number you can get?
- Is the expected value the most likely outcome?
- Can you think of a real-world example of expected value?

Help Me

Expected value helps us predict what might happen on average in real life. For example, if you play a game where you can win different amounts of money, the expected value tells you how much you might win on average if you play many times.