

Comparing Treatments with Data

Today's Standard

HSS.IC.B5 - Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.

Real-World Applications for this Standard

Clinical trials for new medications; Agricultural studies comparing crop yields; Consumer product testing; Educational interventions and their impacts; Marketing campaign effectiveness

Today I Learned

Today, we learned how to use data from experiments to compare two different treatments. We also learned how to use computer simulations to see if the differences we find are important.

Common Stumbling Blocks

Sometimes, kids think any difference between two treatments is important, but that's not always true. Another mistake is thinking that bigger groups always give more important results. We need to look at how big the difference is, not just the group size.

Quiz Me

- What is an experiment?
- Why do we compare two treatments?
- What is a simulation?
- What does significant mean?
- How do we know if a difference is important?

Help Me

We can use data from experiments to see which treatment works better. For example, scientists might test two new medicines to see which one helps more people. They use computer models to check if the differences they find are real or just by chance.