Mystery Data

m&m

Conserving Hotel Towels

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Mystery Data

GeoGebra Does THAT? Doing Statistics and Data Analysis in GeoGebra https://tinyurl.com/ggbdoesstats

m&m

Tintle, Nathan, Beth Chance, George Cobb, Allan Rossman, Soma Roy, Todd Swanson, Jill Vander. Introduction to Statistical Investigations, Enhanced eText. Wiley, 2016. [VitalSource].

Does your bowl size affect how much you eat? Food psychologist Brian Wansink (www.mindlesseating.org) ran an experiment with a group of undergraduates from the University of Illinois at Urbana-Champaign to investigate whether bowl size would affect how many M&Ms® candy pieces students took. The study was conducted over several days.

At one of the sessions, some participants were assigned to receive either a small bowl or a large bowl and allowed to take as many M&Ms as they planned on eating during the study session. At a following session, the bowl sizes were switched, with those who received small bowls at a previous session now receiving large bowls, and vice versa.

m&m data: http://tinyurl.com/nctmggbmm

Conserving Hotel Towels

Tintle, Nathan, Beth Chance, George Cobb, Allan Rossman, Soma Roy, Todd Swanson, Jill Vander. Introduction to Statistical Investigations, Enhanced eText. Wiley, 2016. [VitalSource].

If you have stayed at a hotel recently, you may have noticed how guests are increasingly encouraged to practice conservation habits by not having their towels washed every day—instead hanging them back on the rack to be reused.

A study by Goldstein et al. (2008) conducted a randomized experiment to investigate how different phrasings on signs placed on bathroom towel racks impacted guests' towel reuse behavior. In particular, the researchers were interested in evaluating how messages that communicated different types of social norms impacted towel reuse.

One week prior to a guest staying in the room, rooms at a particular hotel were randomly assigned to receive one of the following five messages on a sign hung on the towel bar in the room:

- 1. No Social Norm HELP SAVE THE ENVIRONMENT. You can show your respect for nature and help save the environment by reusing your towels during your stay.
- Guest Identity Norm JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT. In a study conducted in fall 2003, 75% of the guests participated in our new resource savings program by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay.
- 3. Same Room Norm JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT. In a study conducted in fall 2003, 75% of the guests who stayed in this room (#xxx) participated in our new resource savings program by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay
- 4. Citizen Norm JOIN YOUR FELLOW CITIZENS IN HELPING TO SAVE THE ENVIRONMENT. In a study conducted in fall 2003, 75% of the guests participated in our new resource savings program by using their towels more than once. You can join your fellow citizens in this program to help save the environment by reusing your towels during your stay.
- 5. Gender Identity Norm JOIN THE MEN AND WOMEN WHO ARE HELPING TO SAVE THE ENVIRONMENT. In a study conducted in fall 2003, 76% of the women and 74% of the men participated in our new resource savings program by using their towels more than once. You can join the other men and women in this program to help save the environment by reusing your towels during your stay.

Chi-square data: http://tinyurl.com/nctmggbchi2

All GeoGebra Commands

All the Spreadsheet Commands

These commands are designed for referencing data from Spreadsheet View and copying data into it.

- Cell Command
- CellRange Command
- Column Command
- ColumnName Command
- **■** FillCells Command
- **■** FillColumn Command
- **■** FillRow Command
- Row Command

All the Statistics Commands

https://wiki.geogebra.org/en/Statistics Commands

AP Statistics Inference Commands

□ TMean2Estimate Command	□ ZMeanEstimate Command
□ TMeanEstimate Command	□ ZMeanTest Command
□ <u>TTest Command</u>	ZProportion2Estimate Command
□ TTest2 Command	ZProportion2Test Command
□ <u>TTestPaired Command</u>	ZProportionEstimate Command
Variance Command	ZProportionTest Command
ZMean2Estimate Command	ChiSquaredTest Command
■ ZMean2Test Command	

The Probability Calculator

https://wiki.geogebra.org/en/Probability_Calculator

The Probability Calculator is one of GeoGebra's main perspectives. You may use it in order to calculate and graph probability distributions, as well as to conduct statistical tests.

The Statistics Tab

Tab Statistics allows you to conduct a variety of statistical tests. Just select the test you want to work with from the list available in the drop down menu (e.g. Z Test of a Mean) and specify your Null Hypothesis, as well as your Alternative Hypothesis. Then, adjust the parameters of your test in the provided text boxes and GeoGebra will automatically provide the results of your statistical test.