Hello World!

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April 18, 2016

Introduction

This frame describes why my new statistical method is soooo important.

Notation

- Suppose Y_i for $i = 1, \ldots, n$ is a random sample from a normal population with mean μ and variance σ^2.

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Model

- Important equation:

$$f(y) = \frac{1}{\sigma\sqrt{2\pi}} \exp((y-\mu)^2/2\sigma^2)$$

- Another important equation:

$$f(y) = \frac{1}{\sigma\sqrt{2\pi}} e^{\frac{(y-\mu)^2}{2\sigma^2}}$$

Proposed methodology

An environment involving lists:

1. First item
2. Second item

A	B	
C	D	

Simulation study

- In Section ??, we showed that our proposed methods will change the statistical world as $n \to \infty$.
- Now, we will show the same is true for a fixed sample size of n.

Data

The cereal data:

```
> cereal<-read.csv(file = "cereal.csv")
> head(cereal)

  ID Shelf                             Cereal size_g sugar_g fat_g
1  1     1 Kellog's Razzle Dazzle Rice Crispies     28      10     0
2  2     1            Post Toasties Corn Flakes     28       2     0
3  3     1                 Kellog's Corn Flakes     28       2     0
4  4     1               Food Club Toasted Oats     32       2     2
5  5     1                     Frosted Cheerios     30      13     1
6  6     1               Food Club Frosted Flakes     31      11     0
  sodium_mg
1       170
2       270
3       300
4       280
5       210
6       180
```

Analysis

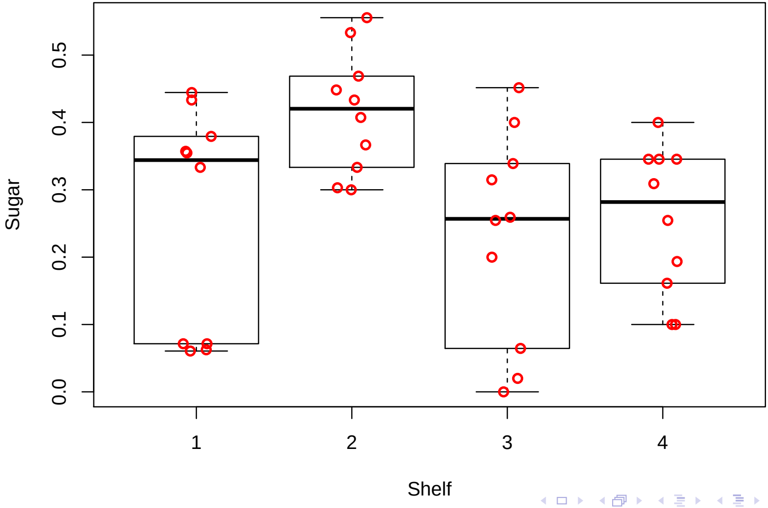
After transforming each variable to be per serving size, below is the mean and standard deviation for each shelf:

```
Mean by shelf
  Shelf     sugar
1     1 0.2568366
2     2 0.4149686
3     3 0.2303732
4     4 0.2554839

Standard deviation by shelf
  Shelf      sugar
1     1 0.16729566
2     2 0.09001019
3     3 0.15770057
4     4 0.11010226
```

The mean sugar content for shelf #1 is 0.2568366.

Plot



Discussion

Thank you