Statistics 624: Homework 2

put your name here

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Abstract. This paper is a homework assignment to test if I can use my skills to typeset a document and reproduce an R figure.

1 Style

When you are writing a Latex document it very *helpful* to know how to do such things like change the font size or put **important words** in bold. It can make your documents look a bit more colorful. So whether you are working with the Black-Scholes partial differential equation,

$$\frac{\partial V}{\partial t} + \frac{1}{2}\sigma^2 S^2 \frac{\partial^2 V}{\partial S^2} + rS\frac{\partial V}{\partial S} - rV = 0, \tag{1}$$

or the gamma distribution,

$$X \sim Ga(\alpha, \beta) \tag{2}$$

$$f_X(x|\alpha, \beta) = \frac{\beta^\alpha}{\Gamma(\beta)} x^{\alpha-1} e^{-\beta x}, \tag{3}$$

you always keep your *style*.

2 Made up Data

Here is some data that may or may not be from Jones et al (2014) or Casella and Berger (2002).

Month	BYU Creamery	Baskin Robbins	Spoon it Up
January	140	50	90
February	120	40	95
March	200	75	120
April	350	100	110
May	130	30	45
June	150	70	60
July	170	100	80
August	250	120	90
September	400	160	120

Table 1: Ice Cream sales in $1,000s for a few popular ice cream locations around Provo over the past few months

As can be seen in Table 1 while keeping equation (1) in mind, Baskin Robbins surpassed Spoon It Up in sales. Figure 1 also shows this.

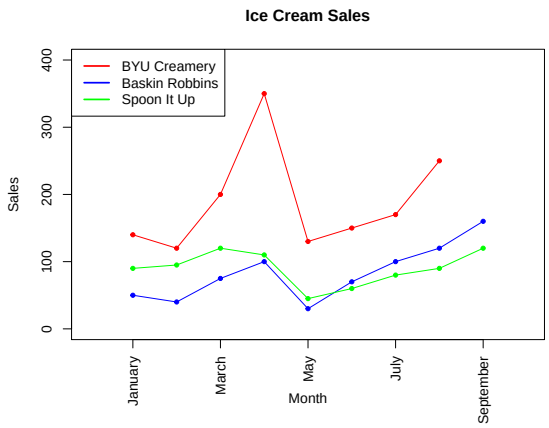

Fig. 1: Ice cream sales by month for three different ice cream stores.

Bibliography

Casella G, Berger R (2002) Statistical Inference, 2nd edn. Wadsworth Group

Jones O, Maillardet R, Robinson A (2014) Introduction to scientific programming and simulation using R. CRC Press