Using the Example Environment with **knitr**

Alan's Modifications and Notes

February 17, 2014

1 Introduction

This is a test of the R Example environment.

1.1 Simple Arithmetic

R Code 1.1.

```
1 + 1
```

```
[1] 2
```

1.2 Generate Random Data

R Code 1.2.

```
x <- rnorm(1000)
```

Find the standard deviation of x.

R Code 1.3.

```
sd(x) # standard deviation
```

```
[1] 0.9728
```

How about R Examples 1.2 and 1.3? The standard deviation of x is 0.9728.

1.3 Graphs and Environments

R Code 1.4.

```
junk <- rnorm(10000)
MEAN <- mean(junk)
MEAN

[1] 0.01513
```

The mean of the junk is 0.0151. Note: It seems that an error is thrown if a code chunk with a graph and `rcode` is executed at the same time. Work around is as shown below. That is, hide the figure when showing the code...then show the figure with a separate code chunk. Note that Figure 1 is hyperlinked!

R Code 1.5.

```
library(ggplot2)
ggplot(data = mtcars) +
  geom_density(aes(x = mpg), fill = "pink") +
  theme_bw() +
  labs(x = "miles per gallon", y = "")
```

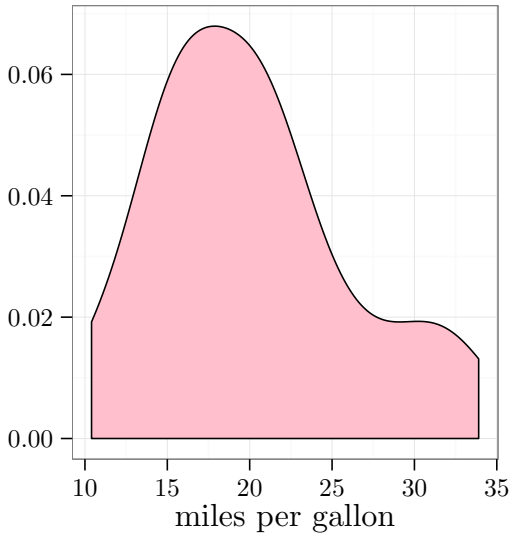

Figure 1: This is where you explain your graph

When working with OSX, one may want to change `engine = 'sh'` to `engine = 'bash'` and output from git will follow.

GIT Example 1.1.

```
git status

# On branch master
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
# ./
nothing added to commit but untracked files present (use "git add" to track)
```

Look at R Code 1.1 to add $1 + 1$ and get the answer 2.