1. Hypotheses: $H_0: \mu_d = 0$

$H_a: \mu_d \neq 0$

test statistic = 0.010533

df = 9

Pvalue = 0.9918

— Some Evidence

2. Hypotheses: $H_0: \mu_d \leq 6$

$H_a: \mu_d > 6$

test statistic = 0.001364

df = 19

Pvalue = 0.9815

Lots of Evidence

3. Hypotheses: $H_0: \sigma_1^2 \leq \sigma_2^2$

$H_A: \sigma_1^2 > \sigma_2^2$

test statistic = 0.431564

df = 24

Pvalue = 0.7135

No Evidence

4. A matched pair is used to determine the difference between an event's outcome
5. I think this workshop was very effective because the p-value is .9944

RCODE:

```
#require the necessary packages
require(MASS)
require(mosaic)
require(openintro)

#read in the data
Perform<-read.csv("http://www.math.usu.edu/cfairbourn/Stat2300/RStudioFiles/data/Perform.csv")

diff<-Perform$Before-Perform$After

t.test(diff, mu=0, alternative="greater")
```