

# homework 03

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```
# some data
x <- c(6.20, 5.72, 6.07, 6.75, 5.50, 6.39, 4.30, 4.96, 5.48)
y <- c(6.49, 6.52, 6.28, 8.59, 7.18, 4.92, 6.74, 7.27)

# run the permutation test
permt <- perm.test(x, y)

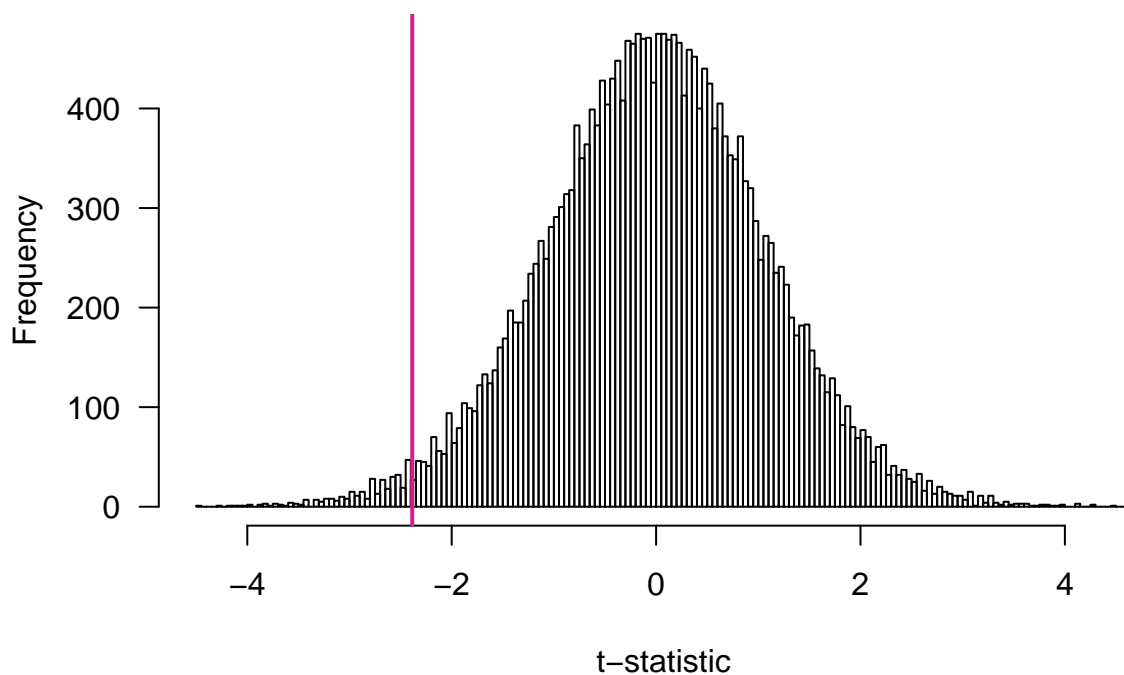
# grab the observed t-statistic (saved as attribute)
tobs <- attr(permt, "tobs")

# calculate p-value
pval <- mean(abs(permt) >= abs(tobs))
```

```
## pdf
## 2
```

```
hist(permt, breaks=200, xlab="t-statistic", las=1,
      main = paste("P-value =", round(pval, 3)))
abline(v=tobs, lwd=2, col="violetred")
```

**P-value = 0.029**



```
sessionInfo()
```

```
## R version 3.1.2 (2014-10-31)
```

```

## Platform: x86_64-pc-linux-gnu (64-bit)
##
## locale:
## [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
## [3] LC_TIME=en_US.UTF-8      LC_COLLATE=en_US.UTF-8
## [5] LC_MONETARY=en_US.UTF-8  LC_MESSAGES=en_US.UTF-8
## [7] LC_PAPER=en_US.UTF-8     LC_NAME=C
## [9] LC_ADDRESS=C             LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods    base
##
## loaded via a namespace (and not attached):
## [1] digest_0.6.8      evaluate_0.5.5    formatR_1.0      htmltools_0.2.6
## [5] knitr_1.9         rmarkdown_0.3.10 stringr_0.6.2    tools_3.1.2
## [9] yaml_2.1.13

```