A Minimal Demo of knitr

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You can test if **knitr** works with this minimal demo. OK, let's get started with some boring random numbers:

```
set.seed(1121)
(x <- rnorm(20))

## [1]  0.14496  0.43832  0.15319  1.08494  1.99954 -0.81188  0.16027  0.58589  0.36009
## [10] -0.02531  0.15088  0.11008  1.35968 -0.32699 -0.71638  1.80977  0.50840 -0.52746
## [19]  0.13272 -0.15594

mean(x)

## [1] 0.3217

var(x)

## [1] 0.5715
```

1 Your Turn 1

```r
set.seed(1121)
(x <- rnorm(30))

##  [1]  0.14496  0.43832  0.15319  1.08494  1.99954 -0.81188  0.16027  0.58589  0.36009
## [10] -0.02531  0.15088  0.11008  1.35968 -0.32699 -0.71638  1.80977  0.50840 -0.52746
## [19]  0.13272 -0.15594  0.06415 -0.07236  0.08807  0.29775 -0.66460 -1.15103  0.40493
## [28] -0.46179 -0.79187  0.08349

sum(x)

## [1] 4.232

mean(x)

## [1] 0.1411

var(x)

## [1] 0.5246
```
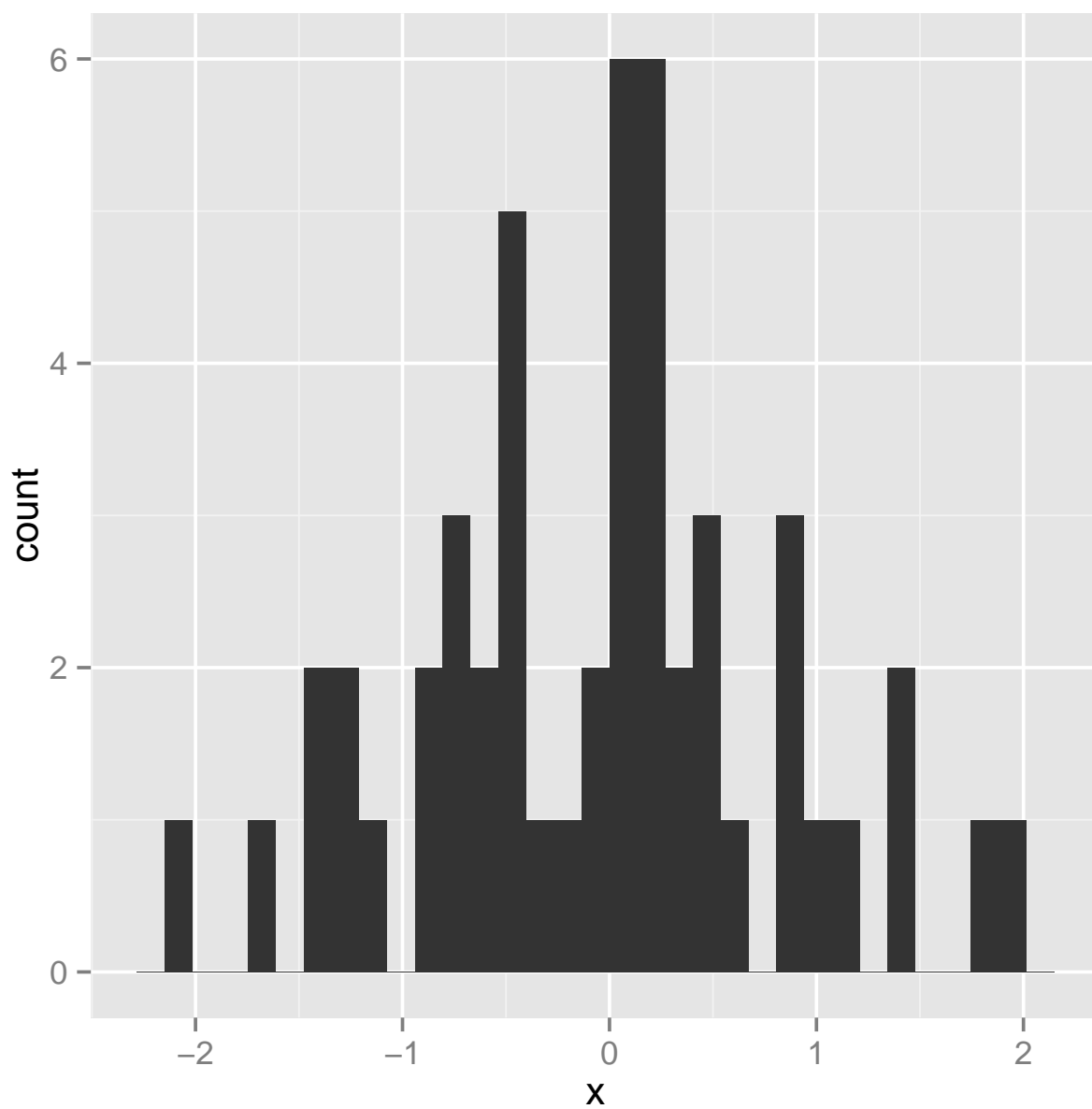
2 Your Turn 2

```
set.seed(1121)

x <- rnorm(50)

library(ggplot2)
qplot(x, geom = "histogram")

## stat_bin:  binwidth defaulted to range/30.  Use 'binwidth = x' to adjust this.
```
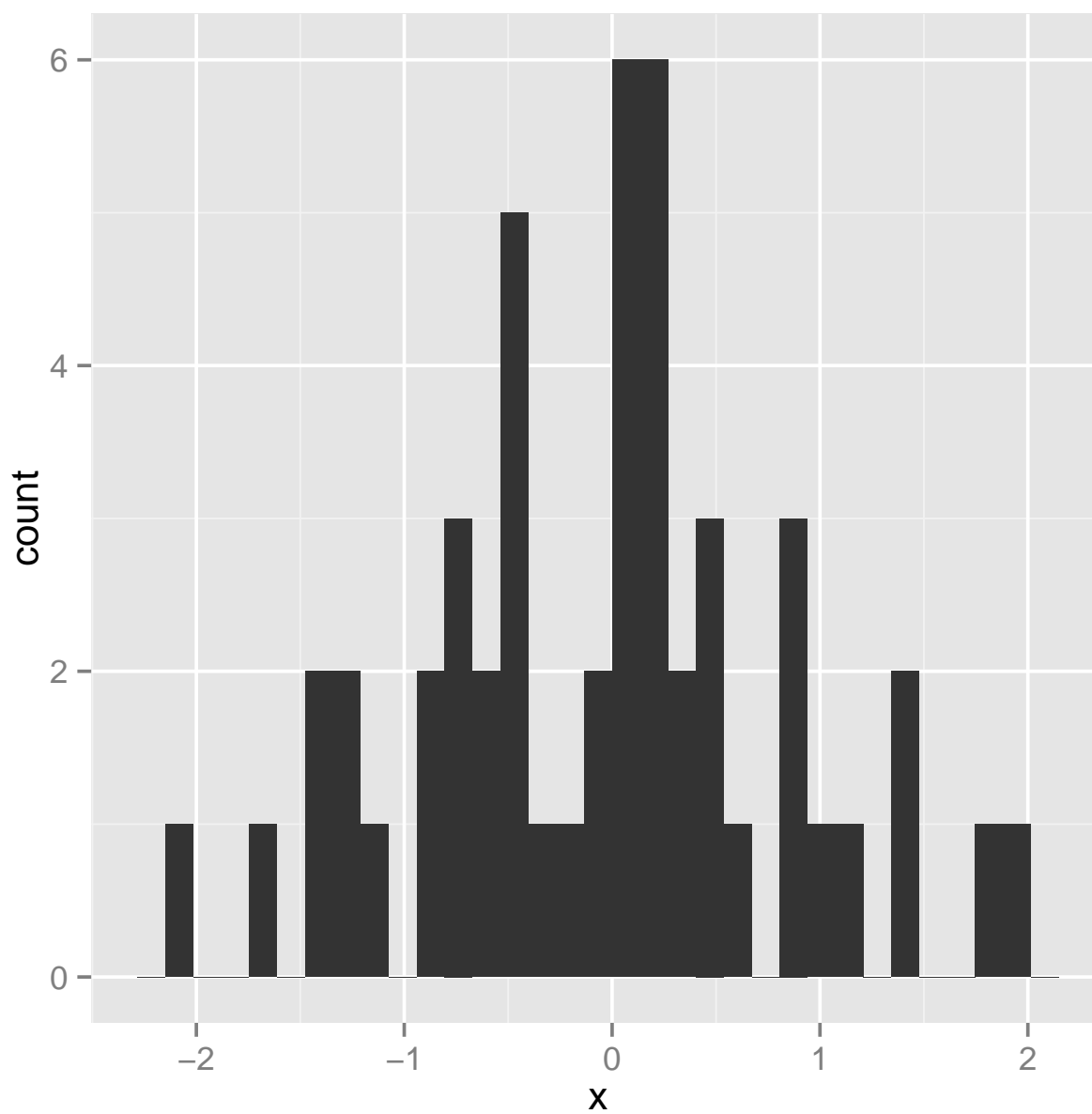
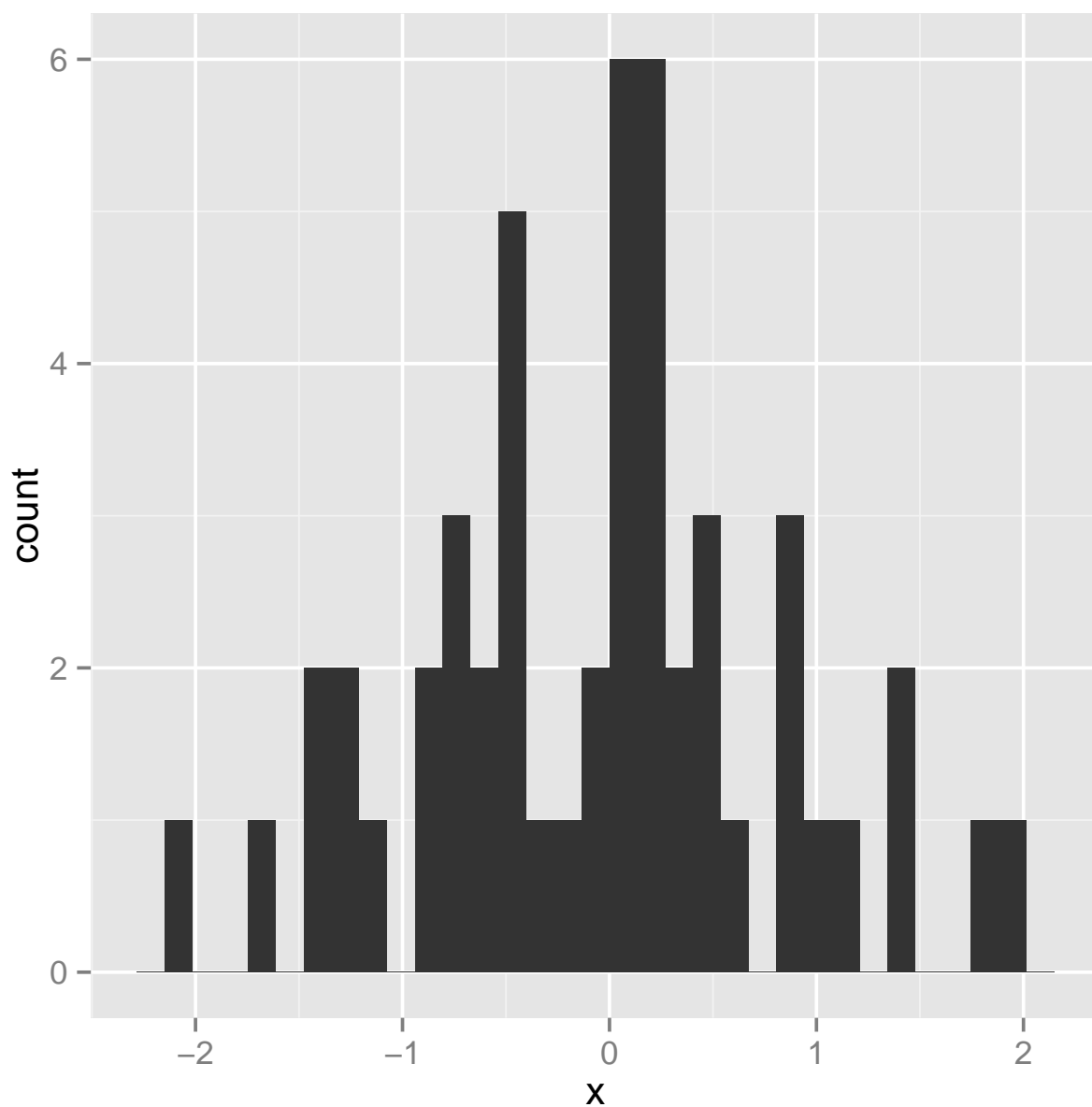# 3 Your Turn 3

Knitr options: message=FALSE, warning=FALSE

```
set.seed(1121)
x <- rnorm(50)
library(ggplot2)
qplot(x, geom = "histogram")
```
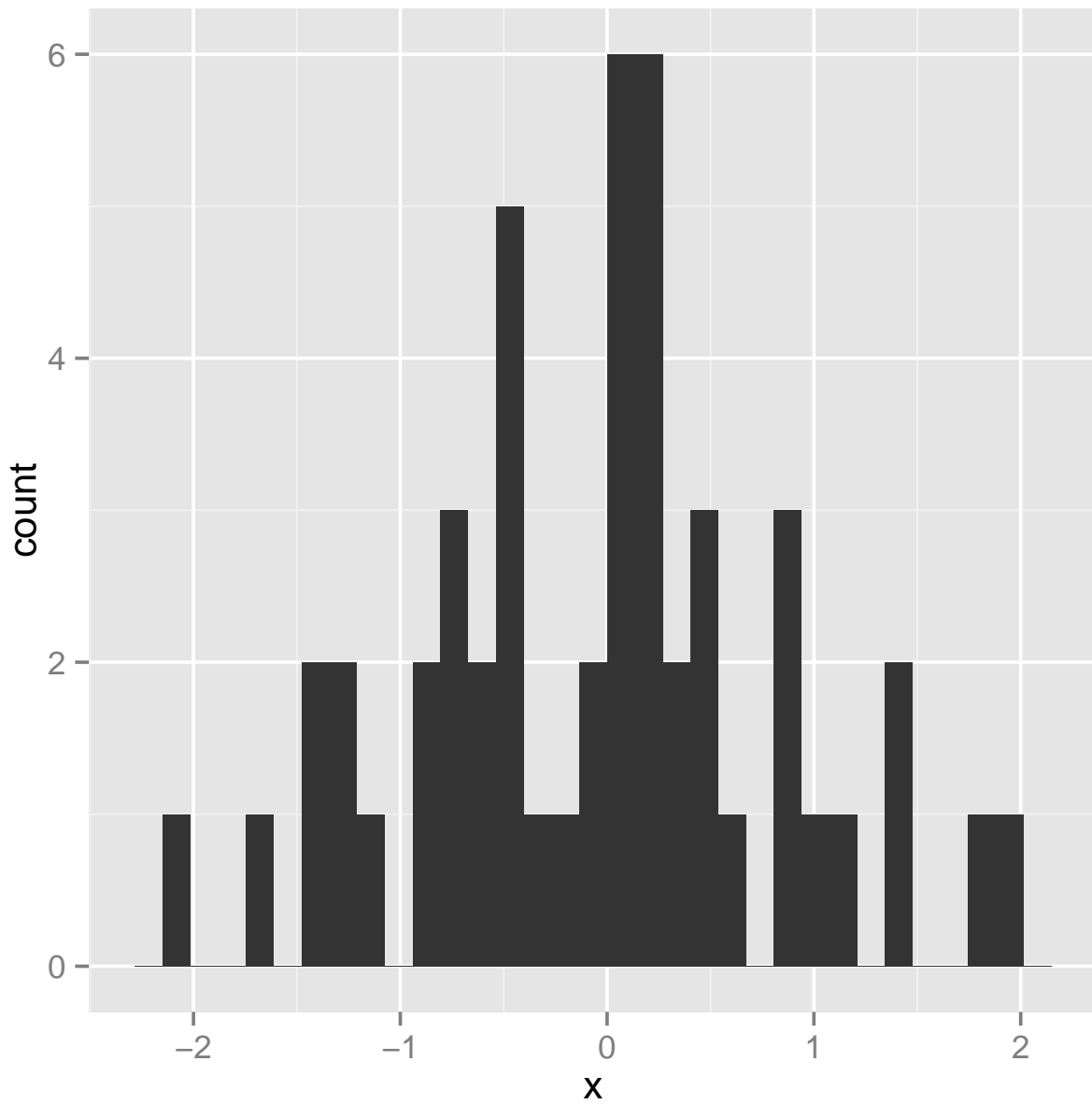
Knitr options: message=FALSE, tidy=FALSE
Note that the spacing of the code is different than on the previous page.

```
set.seed(1121)
x<-rnorm(50)
library(ggplot2)
qplot(x,geom="histogram")
```
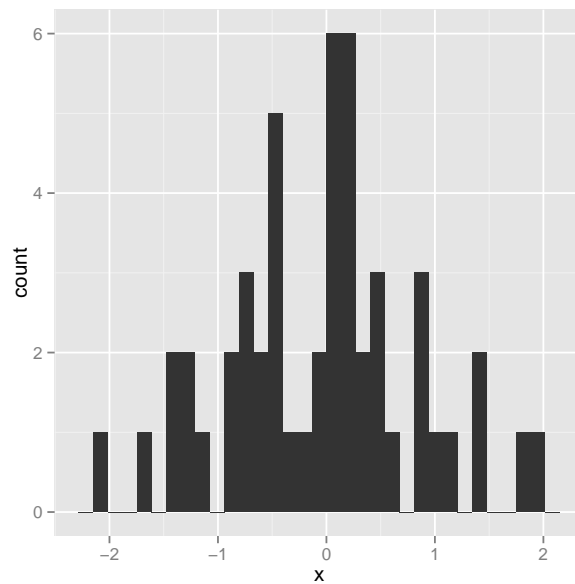
Knitr options: dependson='pretty-histogram1', message=FALSE, echo=FALSE
I'm using the previously generated x, not re-generating it.
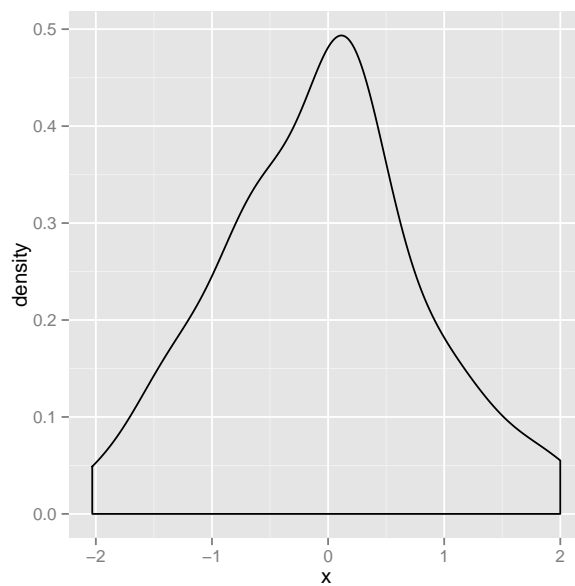Note that now only the plot shows up.

4 Your Turn 4

Knitr options: dependson='pretty-histogram1', message=FALSE, out.width=’.49\\textwidth’

```
qplot(x, geom = "histogram")
```



```
qplot(x, geom = "density")
```


Knitr options: dependson='pretty-histogram1', message=FALSE, out.width=’.49\\textwidth’, fig.show=’hide’

```
qplot(x, geom = "histogram")
qplot(x, geom = "density")
```
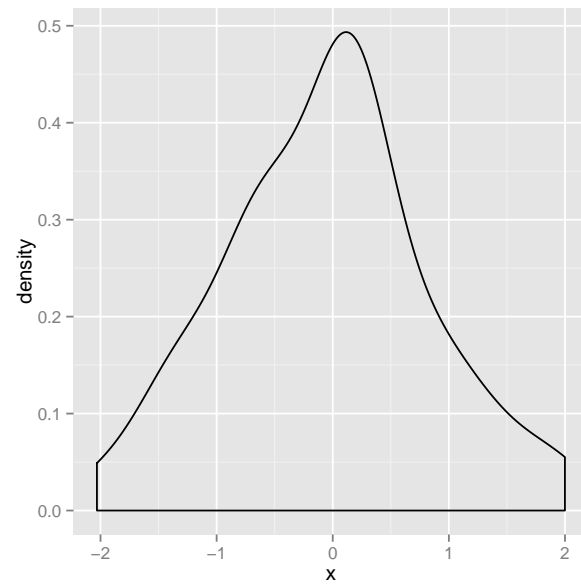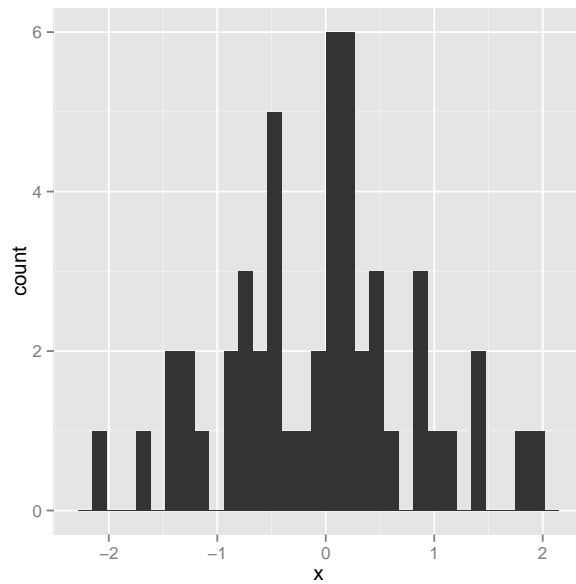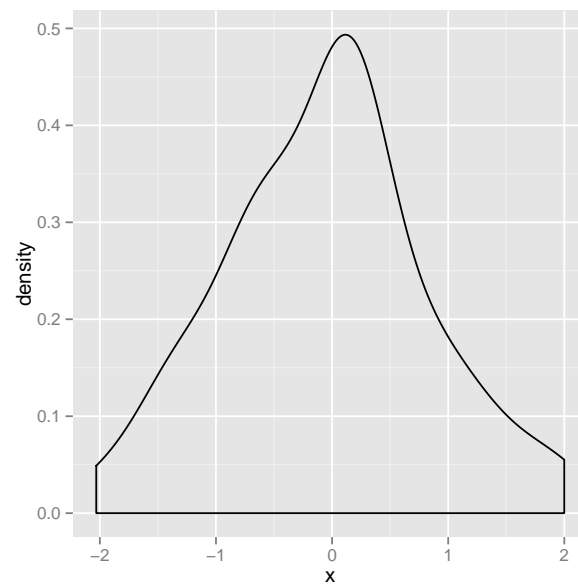
Knitr options: dependson='pretty-histogram1', message=FALSE, out.width='.49\\textwidth', fig.show='hold'

```
qplot(x, geom = "histogram")
qplot(x, geom = "density")
```


Knitr options: dependson='pretty-histogram1', message=FALSE, out.width='.49\\textwidth', fig.keep='last'

```
qplot(x, geom = "histogram")
qplot(x, geom = "density")
```

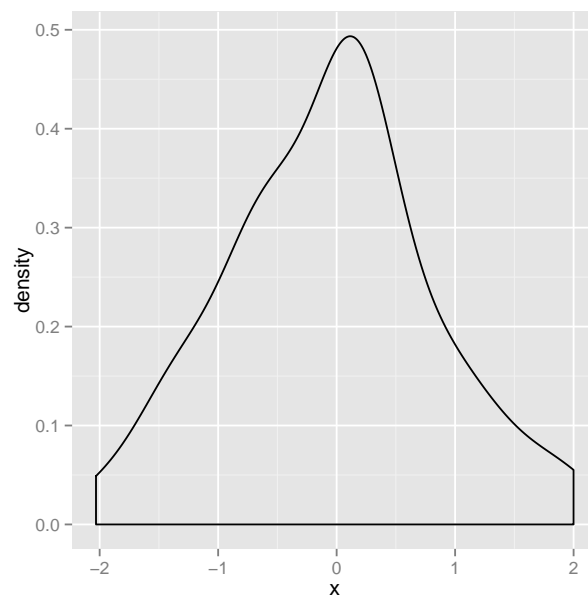Including pictures directly: code chunk options - include=FALSE

Figure 1: What a nice figure

Do this by using

```
\begin{figure}[h!]
\centering
\includegraphics[keepaspectratio=TRUE,width=.5\textwidth]{figure/lots-of-plots5}
\caption{What a nice figure}
\end{figure}
```