## Sweave Example

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This is how you write basic math inline with text: x + y = z

This is how you write basic math in displayed equation:

$$x + y = z$$

This is how you write a matrix:

$$\mathbf{X} = \begin{pmatrix} x_{11} & x_{12} & x_{13} \\ x_{21} & x_{22} & x_{23} \end{pmatrix}$$

This is how you make a numbered list:

- 1. First element of list
- 2. Second element of list

This is how you make an unnumbered list:

- $\bullet$  First element of list
- Second element of list

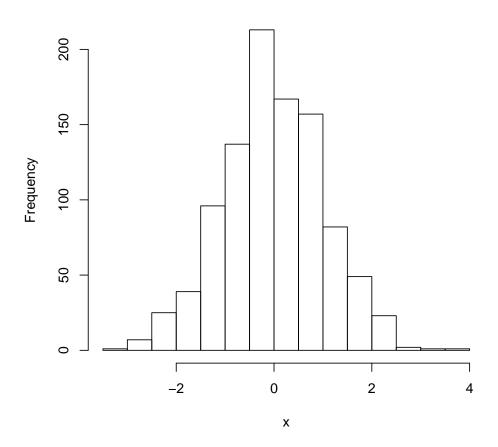
This is how you include basic R code:

- > set.seed(1)
- > x = rnorm(1000)
- > mean(x)
- [1] -0.01164814
- > sd(x)
- [1] 1.034916
- > y = rnorm(1000, mean=1, sd=2)
- > mean(y)
- [1] 0.9674762
- > sd(y)
- [1] 2.079963

This is how you include R code with figures:

- > set.seed(1)
- > x = rnorm(1000)
- > hist(x)

## Histogram of x



This is how you include the value  $\pi=3.14159265358979$  in line with text.