

Getting help

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Asking questions

- ▶ **In a standard class**
- ▶ There are 30-100 people
- ▶ You raise your hand and ask a question
- ▶ The instructor responds
- ▶ **In a MOOC**
- ▶ There are almost 100,000 people
- ▶ You post a question to the message board
- ▶ Others vote on your questions
- ▶ Your instructor responds (as often as possible)
- ▶ Your peers respond (as often as possible)

Often the fastest answer is the one you find yourself

- ▶ It's important to try to answer your own questions first
- ▶ If the answer to your question is in the help file or the top hit on Google, the answer to your question will be, “Read the documentation” or “Google it” (<http://lmgtyfy.com/>)
- ▶ If you figure out the answer and see the same questions on the forum, post the solution you found

Some important R functions

Access help file

```
?rnorm
```

Search help files

```
help.search("rnorm")
```

Get arguments

```
args("rnorm")
```

```
## function (n, mean = 0, sd = 1)  
## NULL
```

Some important R functions

See code

```
rnorm
```

```
## function (n, mean = 0, sd = 1)
## .Call(C_rnorm, n, mean, sd)
## <bytecode: 0x7f8ec442e438>
## <environment: namespace:stats>
```

R reference card

<http://cran.r-project.org/doc/contrib/Short-refcard.pdf>

How to ask an R question

- ▶ What steps will reproduce the problem?
- ▶ What is the expected output?
- ▶ What do you see instead?
- ▶ What version of the product (e.g. R, packages, etc.) are you using?
- ▶ What operating system?

How to ask a data analysis question

- ▶ What is the question you are trying to answer?
- ▶ What steps/tools did you use to answer it?
- ▶ What did you expect to see?
- ▶ What do you see instead?
- ▶ What other solutions have you thought about?

Be specific in the title of your questions

- ▶ Bad:
- ▶ HELP! Can't fit linear model!
- ▶ HELP! Don't understand PCA!
- ▶ Better
- ▶ R 2.15.0 `lm()` function produces seg fault with large data frame, Mac OS X 10.6.3
- ▶ Applied principal component analysis to a matrix - what are U , D , and V^T ?
- ▶ Even better
- ▶ R 2.15.0 `lm()` function on Mac OS X 10.6.3 – seg fault on large data frame
- ▶ Using principal components to discover common variation in rows of a matrix, should I use U , D or V^T ?

Etiquette for forums/help sites: DOs

- ▶ Describe the goal
- ▶ Be explicit
- ▶ Provide the minimum information
- ▶ Be courteous (never hurts)
- ▶ Follow up and post solutions
- ▶ Use the forums rather than email

Etiquette for forums/help sites: DON'Ts

- ▶ Immediately assume you found a bug
- ▶ Grovel as a substitute for doing your work
- ▶ Post homework questions on mailing lists (people don't like doing your homework)
- ▶ Email multiple mailing lists at once/the wrong mailing list
- ▶ Ask others to fix your code without explaining the problem
- ▶ Ask about general data analysis questions on R forums.

Credits

- ▶ Roger's Getting Help Video
- ▶ Inspired by Eric Raymond's "How to ask questions the smart way"