

## Tools for Reproducible Research

### Week 1 Homework

0. Install a bunch of software on your laptop.

(a) Windows

- [R](#)
- [Rtools](#)
- [RStudio](#)
- [Git Bash](#)
- An editor, such as [Notepad++](#)
- [MikTeX](#) (for LaTeX); add it to your `PATH` (for example, see [this page](#)).

(b) Mac

- [R](#)
- [RStudio](#)
- Xcode command line tools (see [this page](#))
- [git](#) (or via [Homebrew](#): `brew install git`)
- Perhaps [iTerm2](#)
- [MacTeX](#) (for LaTeX)

1. Visit the following doodle poll and indicate your preferred times for office hours.

[bit.ly/BromanSpring2015OfficeHours](http://bit.ly/BromanSpring2015OfficeHours)

2. Download the course repository.

(a) Open a terminal window.

(b) Type `git clone git://github.com/kbroman/Tools4RR`

3. Try out GNU Make.

(a) Change to the Lec 1 examples directory:

```
cd Tools4RR/01_Intro/Examples
```

(b) Create a subdirectory for the figures:

```
mkdir Figs
```

(c) Use make to create `Figs/fig1.pdf`:

```
make Figs/fig1.pdf
```

(d) Make the whole paper:

```
make
```

(e) Use the `Makefile_fancy` file to remove all the pdfs:

```
make -f Makefile_fancy clean
```