Tools for Reproducible Research
Week 1 Homework

1. Install a bunch of software on your laptop.

   (a) Windows

      - R
      - Rtools (includes `make`)
      - RStudio
      - Git Bash
      - An editor, such as Notepad++
      - Pandoc
      - 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 (via Homebrew: `brew install git`)
      - Perhaps iTerm2
      - An editor, such as Sublime Text
      - Pandoc (via Homebrew: `brew install pandoc`)
      - MacTeX or BasicTex (for LaTeX)

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`