

Using R as a lookup table

The `pnorm` function replaces ordinary lookup tables at the back of most statistics textbooks. Usually with `pnorm`, as with most things in R, there are multiple ways to get what you need, but here are some examples.

```
pnorm(0.789) #Pr Z </= 0.789
pnorm(0.789, lower.tail=FALSE) # Pr Z > 0.789
1-pnorm(0.789) # Pr Z > 0.789
pnorm(84, mean=72, sd=15.2, lower.tail=FALSE) # Pr X~N(72, 15.2) > 0.789
pnorm(84, mean=72, sd=15.2) Pr X~N(72, 15.2) </= 0.789
```

For intervals, e.g, $\Pr(150 < x < 200)$ use subtraction:

```
pnorm(150, mean=170, sd=30, lower.tail=FALSE) -
pnorm(200, mean=170, sd=30, lower.tail=FALSE)
```