Professor Notes About the "Confidence Regions" Homework

• XXX

Confidence Region Calculations

- 1. See below.
 - (a) C=0.95
 - (b) Upper bound
 - (c) $Z^*=1.645$.
 - (d) 79.0.
 - (e) I am 95% confident that the true population mean is less than 79.0.
- 2. See below.
 - (a) C=0.95
 - (b) Interval
 - (c) $Z^* = \pm 1.960$.
 - (d) 1122.1-1617.9.
 - (e) I am 95% confident that the true population mean is between 1122.1 and 1617.9.

Beetle Size

- 1. 188.7
- 2. I am 95% confident that the true population mean thorax length is greater than 188.7 mm.

R Appendix.

```
library(NCStats)
zstar <- distrib(0.95,type="q")
zstar <- distrib(0.975,type="q")
distrib(0.95,type="q",lower.tail=FALSE)</pre>
```