

# Short notes on z-score

Yuan Huang

February 15, 2013

## Two-sided situation

Say if you want the significant level to be 90%, which means:

- The middle part is 90%.
- In two-sided situation, both upper and lower tail get 5% each.
  - For the red point, the book use  $z_{\alpha/2}$ , i.e.,  $z_{0.05}$
  - In R, you need to check  $qnorm((1 - \alpha/2), 0, 1)$ , i.e.,  $qnorm(0.95, 0, 1)$
  - In the table of the book, you need to find out where the probability of  $1 - \alpha/2$  fall between and locate its row and column.

