STAR511: HW 2

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# Q1

P(Z <= -0.21) = 0.4168338

# Q2

P(-1.44<Z<0.53)

## [1] -0.6270103

# Q3

## [1] 0.7929874

# Q4

# Q5

# Q6

## [1] 0.08399752

# Appendix

#Retain (and do not edit) this code chunk!!!  
library(knitr)  
knitr::opts\_chunk$set(echo = FALSE)  
knitr::opts\_chunk$set(message = FALSE)  
#Q1  
pnorm(-0.21)  
#Q2  
pnorm(-1.44)-pnorm(0.53)  
#Q3  
q3val <- 1-0.4180  
1-qnorm(q3val)  
#Q4  
SATmean <- 510  
SATsd <- 115  
prob600 <-pnorm(600,mean=SATmean, sd=SATsd, lower.tail=FALSE)  
  
#Q5  
prob450 <- pnorm(450,mean=SATmean, sd=SATsd)  
prob450 - prob600