9.1

1. if Z is norm (mean = 0, sd = 1)

Find P(z > 2.64) = .4959

Ans; The probability that a standard normal random variable (z) is greater than a given value (a) is easy to find. The table shows the P(Z < a). Then P(Z > a) = 1 - P(Z < a).   
  
 From the normal distribution table (of Kenblack im pg 187), we find that P(Z < 2.64) = 0.4959. Therefore, P(Z > 2.64) = 1 - P(Z < 2.64) = 1 - 0.4959 = 0.5021.

Find p(|Z| > 1.39)

From the table (see above), we find that P(Z < 1.39) = 0.4177. Therefore, P(|Z| > 1.39) = 1 - P(Z < 1.39) = 1 - 0.4177 = 0.5823.

2. Suppose p = the proportion of students who are admitted to the graduate school of the University of California at Berkeley, and suppose that a public relation officer boasts that UCB has historically had a 40% acceptance rate for its graduate school. Consider the data stored in the table UCBAdmissions from 1973. Assuming these observations constituted a simple random sample, are they consistent with the officerâ..s claim, or do they provide evidence that the acceptance rate was significantly less than 40% . Use an +- = 0.01 significane level.

Ans: not covered in class

9.2

1. Calculate the P Value for the test in Problem 2.

Not covered in class

2. How do you test the proportions and compare against hypothetical props? Test Hypothesis: proportion of automatic cars is 40%.

Ans: not covered in class