STAT212   Quiz 1   Monday February 18, 2013

Name: ─────────────────────   ID #: ──────────────

1) The calculated (observed, computed) z statistic for a hypothesis test is -1.55. In each of the following situations, what is the p-value of the test? Also discuss what your decision could be if the significance level α is not pre-assigned?

   a) The test is upper one-tailed.

   b) The test is lower one- tailed.

   c) The test is two- tailed.

2) The US Department of Commerce estimates that 17% of all automobiles on the road in the US at a certain time are made in Japan. An organization that wants to limit imports believes that this proportion is higher. A random sample of 2000 cars is observed, 381 of which are made in Japan. Conduct a hypothesis test at $\alpha = 0.01$, and state whether you believe the estimated figure.