Applied Statistics HW 6

1. In a test, students receive a grade from 1 to 100. In a class consisting of about 500 students, their test scores follow an approximately normal distribution, with a mean of 76.5 and a standard deviation of 10.3.

   a. Students who scored 95 and above would get an A. Approximately how many students would that be?

   b. How many students approximately scored in the B range of 80 to 90?

c. What was the first quartile score?

d. The teacher will assign an F to those students that scored 60 or below. How many students approximately would that be?

2. Batting averages for baseball players are approximately distributed, and have an average of 0.278 with a standard deviation of 0.02.

   a. We could call someone an exceptional batter, if his batting average is in the top 1% of all batting averages (BA). What BA does such a batter need to have, at least?

   b. Provide a range of batting averages that would encompass 99.9% of all BAs.

c. A certain batter scored a 0.267. What percentile is that value?