| MA 110-91 <br> s4.4-4.5 | QuiZ \#7 |  | Name: $\quad$ score |
| :--- | :--- | :--- | :--- |

1. Prefessor Lou Zer is teaching a very popular course in advanced celestial mechanics with 250 students. The scores on the first test have a mean of 78 and a standard deviation of 9. If Professor Zer wants to have 50 students earn an A on the first test, what should the cut-off score be for a A? (7 points)
2. How many individuals would need to be questioned in a survey if we want to have a level of confidence of $95 \%$ with a possible margin of error of $3 \%$ ? Suppose we need a MOE of $2 \%$ with confidence level $95 \%$ - how many individuals are needed in the sample? (10 points)
