

# MAE 334 Quiz 3

- Closed Book and Notes
- No Calculators
- 1. **Fill in your name** on side 2 of the scoring sheet (Last name first!)
- 2. **Fill in your 8-digit person number** on your scoring sheet.
- 3. **Fill in circle 1 under GRADE OR EDUCATION** on your scoring sheet. This is your test number! You will receive a ZERO if you do not indicate your test number.
- For each question, choose **THE BEST ANSWER** and mark the corresponding answer on the scoring sheet.
- There is only 1 best answer per question.

**NAME**

**LAST NAME FIRST**

**SEX** FEMALE  MALE

**BIRTH DATE** Yr. | Mo.

**SPECIAL CODES**

**IDENTIFICATION NUMBER**

**GRADE OR EDUCATION**

**DO NOT WRITE IN THIS SPACE**

**SIDE TWO**

1. We have defined  $\bar{x}$  in this class to be mean value of a data set.
  - a. True
  - b. False
2. The total area under a probability density function is related to variance of a data set.
  - a. True
  - b. False
3. The variance of a data is equal to the square of the standard deviation.
  - a. True
  - b. False
4. The confidence or precision interval  $\pm t_{\nu, P} S_x$  (P%) gives the probability of a given data point,  $x_i$ , differing from the data set mean value.
  - a. True
  - b. False
5. The standard deviation of the means gives a measure of the standard random uncertainty in the data set mean value.
  - a. True
  - b. False
6. The number of degrees of freedom,  $\nu$ , of a linear fit to a 25 point calibration data set is?
  - a. 22
  - b. 23
  - c. 24
  - d. 25