

Quiz 2 (Group) for Statistics 113
Statistics and Society - Spring 2000
Material Covered: Chapters 5,6 of notes and text
For: Friday, 11th February

Name 1 (please print): _____
last first

Name 2 (please print): _____
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Name 3 (please print): _____
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Name 4 (please print): _____
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The student enrollment at PU/NC for each semester over the last years follows a normal curve, with an average of 3550 students and SD of 150. For example, over the last few semesters it has been 3256, 4015, 3500 and 3458.

- (a) [1] The student enrollment two and one half SDs above the average is (circle closest one) **3925 / 4215 / 4435 / 5000 / 5125** hours.
- (b) [1] If there are 625 students less than the average one semester, how many SD units is this below the average? _____
- (c) [1] The percentage of enrollments within 1.5 SD of the average is _____.
- (d) [1] The 23rd percentile is _____.
- (e) [2] Match the following terms with the PU/NC students example below. (The four terms in the left column are matched with only *four* of the six descriptions in the right column.)

terms	PU/NC students example
(a) statistic	(a) average enrollment, for all semesters
(b) parameter	(b) average student number, for a few selected semesters
(c) population	(c) a few selected semesters
(d) sample	(d) student enrollments for a few selected semesters
	(e) all semesters
	(f) student enrollments for all semesters

terms	(a)	(b)	(c)	(d)
PU/NC students example				

- (a) [1] **3925**
- (b) [1] **4.2** ($\frac{625}{150}$)
- (c) [1] **86.64%** (look 1.5 up in the tables)
- (d) [1] **3437.5** (23rd implies an area of 54% in the normal tables, which give 0.75, and so $3550 - 0.75(150) = 3437.5$)
- (e) [2] Match

terms	(a)	(b)	(c)	(d)
PU/NC students example	(b)	(a)	(f)	(d)