

Quiz 2 (Group) for Statistics 113
Statistics and Society–Fall 2001
Material Covered: Chapters 5,6 of Workbook and text
For: Friday, 21st September

Name 1 (please print): _____
last first

Name 2 (please print): _____
last first

Name 3 (please print): _____
last first

Name 4 (please print): _____
last first

The average weight of the 1000 men at PU/NC is 160 pounds with a SD of 15 pounds; the average weight of the 2500 women is 130 pounds with a SD of 15 pounds.

- (a) [1 point] The weight of a man two and one quarter SDs above the average is (circle closest one) **192.75 / 193.75 / 194.75 / 195.50 / 196.75** points.
- (b) [1 point] If a woman weights 25 pounds less than the average, how many SD units is this below the average? _____.
- (c) [1 point] Use the normal approximation to estimate the percentage of men's weights within 1.25 SDs of the average.
(circle closest one) **21 / 39.5 / 42 / 79 / 97**
- (d) [1 point] Use the normal approximation to estimate the number of women's weights within 1.25 SDs of the average.
(circle closest one) **1950 / 1965 / 1975 / 1980 / 1990**
- (e) [1 point] The SD of the combined men's weights and women's weights is (circle one) **smaller than / the same as / larger than** 15 pounds.

(a) **193.75.**

$$(160 + 2.25(15) = 193.75.)$$

(b) **5/3.**

$$\left(\frac{25}{15} = 5/3 \approx 1.66\right)$$

(c) **79.**

(using table, 78.87% within 1.25 SDs)

(d) **17.**

(using table, 78.87% within 1.25 SDs and so $0.7887(2500) \approx 1971.25$)

(e) **larger than**

two different (separate, spread out) distributions