

Pledge:

2/22/2008
Dr. Lunsford

MATH 171
Test 1

Name: Solution
100 Points Possible

Please show all work on this test (including calculator commands with input) to receive full credit.

I. Short Answer and Multiple Choice. All problems count 2 points unless otherwise indicated. (45 points total)

1. The median waiting time for patients to see a doctor at a local emergency room is much smaller than the mean waiting time. Which of the following is most consistent with this information (circle one):

- a. A histogram of the waiting times would be symmetric.
- b. A histogram of the waiting times would be left-skewed.
- c. A histogram of the waiting times would be right-skewed.



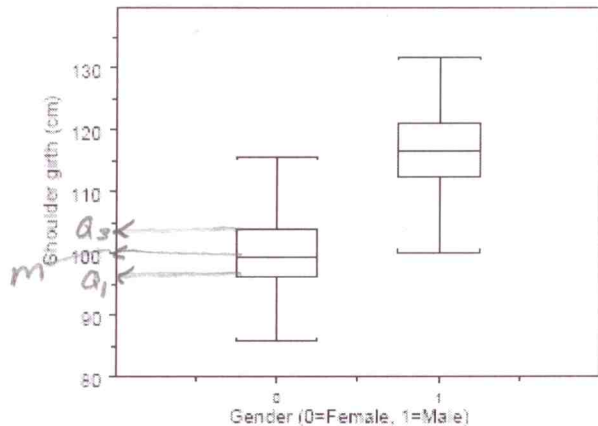
2. What type of data, categorical or *quantitative* (circle one), is produced by the answer choices for this question:

How many times have you accessed the internet this week?
(a) none
(b) once or twice
(c) three or four times
(d) more than four times

Use the following side-by-side boxplots of female and male shoulder girth to answer Questions 3 through 6 below:

3. Which of the following statements is most correct?

- a. Females have a typically smaller shoulder girth than males.
- b. Females have a typically larger shoulder girth than males.
- c. Females and males have about the same shoulder girths.
- d. None of the above are correct.



4. Estimate the interquartile range for female shoulder girth: ≈ 9 cm

5. Estimate the median female shoulder girth: ≈ 100 cm

6. Do you think the mean male shoulder girth is larger, smaller, or about the same as the median male shoulder girth? Why? (3 points)

↳ Boxplot is essentially symmetric.

$Q_3 - Q_1 \approx 9 \text{ cm}$ (or 8 or 10)

