

Worksheet #1

1. $\bar{X} = 147.3$ Females
 $\bar{X} = 84.3$ males

2) $\tilde{X} = 49.5$ males
 \Rightarrow Between 0 to 99

$\tilde{X} = 149.5$ Females
 \Rightarrow between 100-199

3) mode is between 0-99
 $M \approx 49.5$

4) $\bar{X} = 20.5$

5) $\tilde{X} = 22.5$
Between 20-25

6) Between
0-5
 $M \approx 2.5$

#7 - #11

See next page \rightarrow

12) 25%

19) $\bar{X} = 66.4$

23) 60, 61, 66, 71, 75

13) 50%

20) $\tilde{X} = 66$

24) 10

15) NO

21) $60 \leq 61$

16) 2

22) $S = 5.1$

17) 2

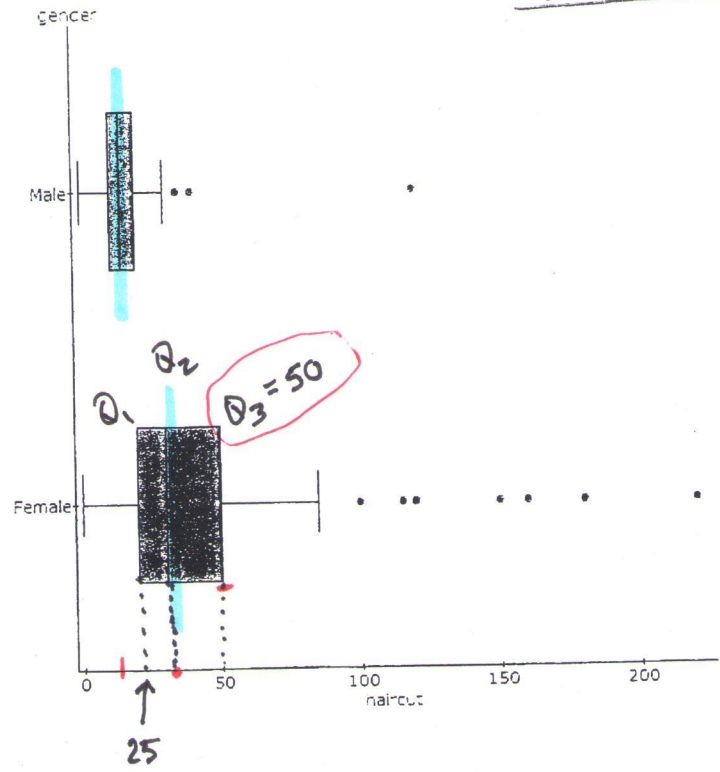
18) NO, same IQR
for both groups

Estimates

Name: _____

Due : _____ points: _____

Below is a boxplot of how much Math 160 students pay for a haircut (including tip)



min
 Q_1
 $Q_2 (\bar{x})$
 Q_3
 max

7) Find the median amount that male students spend.

$\bar{x} \approx 18$

8) Find the median amount that female students spend.

$\bar{x} = 30$

9) Which group has the most variable amount spend on haircuts?

Female students

10) Is it unusual for a female student to spend \$160 on a haircut?

Not enough info

⇒ Do we see outliers?

11) Estimate the percentage of female students who spend more than \$50 on a haircut.

25%

$IQR = Q_3 - Q_1$

unusual?

$\bar{x} - 2s$ | $\bar{x} + 2s$

outliers?

~~~~~~~~~  
 $Q_1 - 1.5 IQR$        $Q_3 + 1.5 IQR$