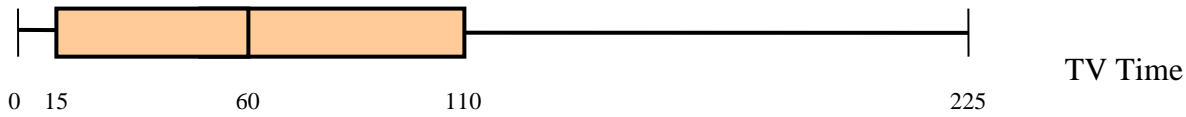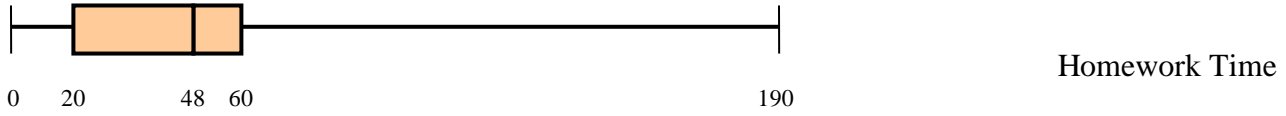**T1-12** Number _____ Name _____ Period _____ Score _____

Twenty high school sophomores were given a survey of how many minutes they watch TV ever night and how many minutes they spend on homework every night. Use the box plots to answer the questions.
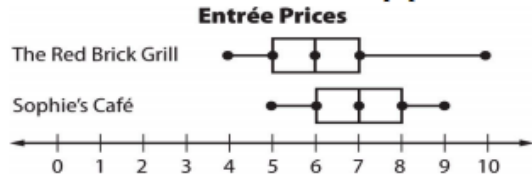
TV & Homework Minutes per Night

Homework Time

0   20   48 60   190

TV Time

0   15   60   110   225

1. What percent of the sophomores watch TV for at least 15 minutes per night?

2. What is the 3rd quartile for the TV time data?

3. Which data set, Homework Time or TV Time, has more variance? How do you know?

_____

_____

For questions 4 – 7, identify if each statement is true or false. For each question, explain why it is true or false.
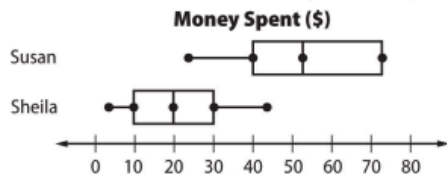
_____   4. Some sophomores didn't watch TV that month.

_____   5. The TV box & whisker graph contains more data than the homework graph.

_____   6. 25% of the sophomores spend between 48 & 60 minutes per night on homework.

_____   7. In general, these sophomores spend more time watching TV than doing
                         homework.

8.

The double box plot shows the cost of the top-selling lunch menu items at two local restaurants. Determine which inference is true about the two populations.
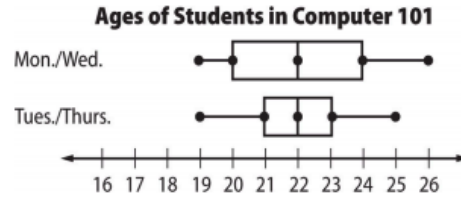
Entrée Prices

The Red Brick Grill

Sophie's Café

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

A The spread of the data for Sophie's Café is greater than that for The Red Brick Grill.

B The spread of the data for The Red Brick Grill is greater than that for Sophie's Café.

C The data for The Red Brick Grill and Sophie's Café are symmetrical.

D The median prices are the same for The Red Brick Grill and Sophie's Café.

9.

The double box plot shows the ages of the students enrolled in two different computer classes. Use the information to determine which statement is NOT an inference that can be made about the two populations.

Ages of Students in Computer 101

Mon./Wed.

Tues./Thurs.

| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |

F The oldest student enrolled in either class is 22 years old.

G The interquartile range for the Mon./Wed class is twice the interquartile range for the Tues./Thurs. class.

H The youngest student enrolled in either class is 19 years old.

J Fifty percent of the students enrolled in the Tues./Thurs. class are between the ages of 21 and 23.

10.

The double box plot shows the amount of money spent by Sheila and Susan on their last ten shopping trips. What is the difference in the interquartile ranges?

Money Spent ($)

Susan

Sheila

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |