## $2^{\text {nd }}$ semester exam review 2014

## part 3

## statistics and data representation

1. The manager of a movie rental store checked the prices at other stores and found the following prices for renting movies. How much should he charge for the mean and the mode to be the same?
A $\$ 4.00$
B $\$ 4.50$
C $\$ 5.00$
D $\$ 6.50$

| Movie Rental Prices |  |
| :---: | :---: |
| Store | Price |
| A | $\$ 6.50$ |
| B | $\$ 4.00$ |
| C |  |
| D | $\$ 4.50$ |
| E | $\$ 5.00$ |

2. The number of times Pam worked out using her Wii Fit over 6 consecutive weeks during the school year is shown.

## 4,6,7,6,2,5

Which statement about Pam's Data is true?
A. The mean is greater than the median.
B. The range is equal to the mean.
$C$. The range is more than the median.
D. The range is equal to the mode.
3. Mark counted the number of times he text messaged his friends over the weekend. On Saturday he sent 15 messages and on Sunday he only sent 7. Which measure of data can be used to determine the variation in number of text messages per day?
A Mean
B Median
C Mode
D Range
4. Given the following stem and leaf plot of math test score:
Math Test Scores (out of 50 points)

| 3 | $5,6,8$ |
| :--- | :--- |
| 4 | $0,2,2,4,5,5,7,8,9$ |
| 5 | $0,0,0$ |

What is the median of the data?
A. 4
B. 5
C. 49
D. 45

Televisions Per Family
X

|  |  | X |  | X |
| :---: | :---: | :---: | :---: | :---: |
|  |  | X | X | X |
| X |  | X | X | X |
| x | x | x | X | X |
| x | x | x | X | X |
| 0 | 1 | 2 | 3 | 4 |

Temperatures
6. The high temperatures for a one-week period are shown. Which of the measures of the data is NOT represented by $70^{\circ} \mathrm{F}$ ?
A. Mean
B. Median
C. Mode
D. Range

| Day of the <br> Week | High <br> Temperature $\left({ }^{\circ} \mathrm{F}\right)$ |
| :---: | :---: |
| Sunday | 75 |
| Monday | 70 |
| Tuesday | 65 |
| Wednesday | 70 |
| Thursday | 72 |
| Friday | 68 |
| Saturday | 70 |

Mrs. Hudzietz collected the data from her 3rd pd's Homework grades and displayed it using a line plot.
7. What is the range of the scores?
8. Without the "outlier", what is the range of the grades?
9. What is the median homework grade?
10. Mr. Haksell bought 5 Ralph Lauren Polo shirts for $\$ 350$. Later he bought another for $\$ 40$. What is the mean cost of all the shirts?
11. Using the line plot below, find the mean.

12. The number of times Pam worked out using her Wii Fit over 6 consecutive weeks during the school year is shown below.

10,8,2,5,6,5,
Which statement about Pam's Data is true?
A. The mean is greater than the median.
B. The range is equal to the mean.
C. The range is less than the median.
D. The range is equal to the mode.

## Use the box plot to determine the following;

13. The Lower Quartile $\qquad$
14. The Median
15. The Upper Quartile $\qquad$
16. The Interquartile Range $\qquad$

17. A public transportation company collected the following data concerning the number of peopls who use public transportation on a regular basis.

## Daly Use of Public Transportation



Which statement is supported by the data?
A Twice as many people use public transportation on Monday than on Wednesday.
B The median number of people who use public transportation is 450 .
C More people use public transportation on Monday and Tuesday than on all other days of the week.

D The same number of people use public transportation on Saturday and Sunday
18. The graph below shows the number of students in each grade at a middle school.

Student Population


Which statement is NOT supported by the information in the graph?
A About 1,100 students attend this middle school.
B There are approximately 10 more girls in the 6 th grade than in the 7 th grade.
C About 400 boys and 400 girls attend this middle school.
D There are approximately 13 more students in 6 th grade than in 8 th grade at this middle school.

19 The stem-and-leaf plot below shows the number of sit-ups done by students in Ms. Truong's gym class.

Sit-ups

| Sit-ups |  |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stem | Leaves |  |  |  |  |  |  |
| 1 | 8 | 8 | 9 |  |  |  |  |
| 2 | 4 | 4 | 5 | 5 | 8 | 9 |  |
| 3 | 2 | 2 | 2 | 3 | 4 | 5 | 9 |
| 4 | 1 | 2 | 2 | 5 | 5 | 5 |  |
| 5 | 0 | 0 | 0 | 2 | 5 | 5 | 6 |

4 | 2 represents 42 sit-ups

Which statement is NOT supported by the data?
A Sixteen students did less than 40 sit-ups.
B Over $\frac{1}{2}$ of the students did more than 40 sit-ups.
C The same number of students did 32 sit-ups as did 50 sit-ups.
D More students did 45 sit-ups than did 55 sit-ups.

