

3.10.20

At The Bell: Grab a packet, calculator & a partner...

NAME _____ DATE _____ PERIOD _____

Lesson 3 Extra Practice***Two-Way Tables***

1. Ninety people in a store were asked whether they liked jeans or khakis and whether they liked T-shirts or tank tops. Out of 25 people that liked khakis, 15 liked T-shirts. There were 55 customers that liked T-shirts.

- Construct a two-way table summarizing the data.
- Find and interpret the relative frequencies of people in the survey by columns.

	T-Shirts	Tank Tops	Total
Jeans			
Khakis			
Total			

2. One hundred and fifty people were asked whether they liked to see comedies or dramas and whether or not they buy popcorn for the movie. Out of 90 people that liked comedies, 75 said they buy popcorn. There were 40 people that said they do not buy popcorn.

- Construct a two-way table summarizing the data.
- Find and interpret the relative frequencies of people in the survey by rows.

	Popcorn	No Popcorn	Total
Comedy			
Drama			
Total			

What Do You Get When You Cross the Atlantic with the Titanic?

Find each answer at the bottom of the page and cross out the letter above it (some are rounded).

1. Practice times for five swimmers in the 50-meter freestyle are given in the table. Find the following:
- a. The mean of Mike's times.
 - b. The mean of Jason's times.
 - c. The mean of the times on Trial 1.
 - d. The median of Ryan's times.
 - e. The median of the times on Trial 4.
 - f. The mode of all 20 times in the table.

Name	Trial 1 (s)	Trial 2 (s)	Trial 3 (s)	Trial 4 (s)
Mike	34.1	33.8	30.5	31.6
Alan	32.5	33.3	34.0	33.8
Jason	41.7	40.0	39.2	38.4
Scott	29.4	29.4	31.0	31.6
Ryan	33.8	32.5	33.8	33.4

2. The weekly salary for 10 people is given in the table. Find:
- a. The mean salary.
 - b. The median salary.
 - c. The mode of the salaries.

Weekly Salary	No. of People
\$2400	1
\$900	1
\$600	3
\$500	5

3. The mean weight of 32 math students is 98.3 lb. If the students could all stand on the scale together, what would their total weight be?
4. The Pie Arsquare Bakery sold 869 pies during the month of January. What was the mean number of pies sold per day?

5. Julie has taken 5 tests in science this semester. On the first three tests, her mean score was 70%. On the last two tests, her mean score was 90%. What is the mean of all five scores?

6. On his trip to the mountains, Klink drove for 3 hours at an average speed of 50 mph, then for 2 hours at an average speed of 30 mph. What was his average speed for the entire trip?

7. As an experiment, Rex tossed 3 coins together and counted the number of heads. He repeated the experiment 25 times. The outcomes are given in the table. What is the mode?

Tossing 3 Coins: Number of Heads				
2	0	2	3	2
1	3	2	0	1
2	2	1	1	2
0	3	1	2	1
2	1	1	2	3

8. Marissa has taken four 100-point tests in math this semester. Her mean score is 89%.
- a. How many points has she scored altogether on the four tests?
 - b. What score does she need on test #5 so that the mean of all five scores will be 90%?

S T H E U P T A L L O I F E W E T A S O Y E S																			
\$500	2	92	33.4 s	32.5 s	\$550	78	3215.8 lb	32.9 s	94	34.3 s	28	1	356	44 mph	33.8 s	3145.6 lb	76	33.6 s	42 mph
																		\$580	39.8 s
																			\$760

Lesson 23: Box-and-Whisker Plots and Stem-and-Leaf Plots

Coached Example

Draw a box-and-whisker plot for the data.

9, 10, 12, 8, 5, 7, 6, 10, 11

List the data values in order from least to greatest.

What is the lower extreme? _____

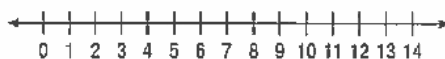
What is the upper extreme? _____

What is the median of the data set? _____

What is the lower quartile of the data set? _____

What is the upper quartile of the data set? _____

Draw the box-and-whisker plot.



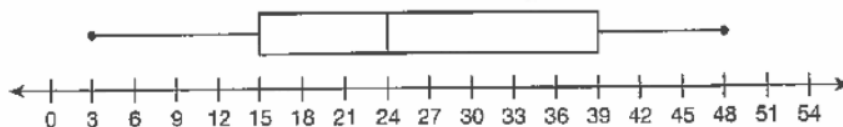
7. In what percent of the games did the Rams score between 18 and 30 points?

A. 25%
B. 50%
C. 75%
D. 100%

8. What is the interquartile range?

A. 12
B. 14
C. 25
D. 45

9. A box-and-whisker plot is shown below.



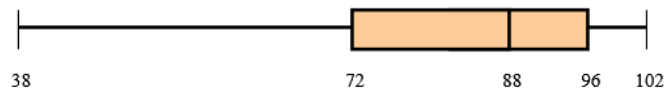
Compute the interquartile range.

Name _____

Period _____

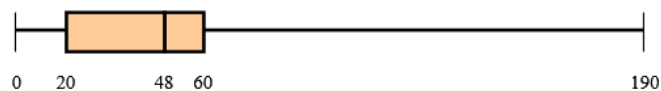
9-4 Box & Whisker Plots / Box Plots

For questions 1 – 4, refer to the box & whisker graph below which shows the test results of a math class.

Test Scores (as %) for 6th Period

- _____ 1. What was the high score on the test?
- _____ 2. What percent of the class scored above a 72?
- _____ 3. What was the median score on the test?
- _____ 4. What percent of the class scored between 88 & 96?

For questions 5 – 8 refer to the box & whisker graph below that shows how much time was spent per night on homework for sophomore class at a certain high school during September.

Average Minutes Per Night Spent On Homework

- _____ 5. What percent of the sophomores spend more than 60 minutes on homework per night?
- _____ 6. What is the range of times that the middle 50% of the sophomores spend on homework per night?
- _____ 7. How many sophomores do not do homework?
- _____ 8. What percent of the sophomores spend less than 20 minutes per night on homework?

Lesson Practice

Choose the correct answer.

Use the stem-and-leaf plot for questions 1–3.

Test Scores	
Stem	Leaves
6	8
7	2 6 6 6
8	4 8 9
9	2 2 6
10	0 0

Key: $6 \mid 8 = 68$

1. What is the median test score?

A. 86
B. 84
C. 88
D. 92

2. What is the range in the test scores?

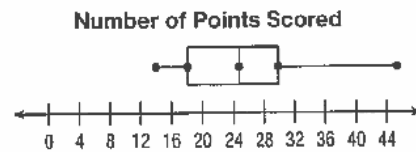
A. 8
B. 14
C. 28
D. 32

3. What is the mode?

A. 76
B. 88
C. 92
D. 100

Use the box-and-whisker plot for questions 4–8.

The box-and-whisker plot shows the number of points scored by the Rams.



4. What was the least number of points the Rams scored?

A. 12
B. 14
C. 18
D. 45

5. What was the greatest number of points the Rams scored?

A. 18
B. 25
C. 30
D. 45

6. What was the median number of points the Rams scored?

A. 18
B. 25
C. 30
D. 45