Statistics Review Worksheet

Name: _____

Simplify.

1. $\begin{bmatrix} 9 & 12 \\ -7 & 3 \end{bmatrix} + \begin{bmatrix} 15 & -8 \\ 4 & 11 \end{bmatrix} =$

2. $[10 \quad 7] - [4 \quad -2] =$

3. $3\begin{bmatrix} 7 & -10 \\ 0 & -2 \end{bmatrix} =$

4. $5\begin{bmatrix} 7 & 1 \\ -3 & 0 \end{bmatrix} + \begin{bmatrix} 8 & -6 \\ 12 & 9 \end{bmatrix} =$

5. $4\left(\begin{bmatrix} 3 & 10 \\ -2 & 7 \end{bmatrix} + \begin{bmatrix} 9 & -1 \\ -5 & 11 \end{bmatrix} \right) =$

You roll a ten-sided number cube. Find the probability of rolling each of the following.

6. P(5)

7. P(odd)

8. P(3 or 8)

9. P(12)

You choose a marble at random from a bag containing 7 red marbles, 8 blue marbles, and 5 green marbles. You replace the tile, then choose again. Find each probability.

10. P(both green)

11. P(blue then red)

12. P(green then blue)

Find the value of each expression.

13. $_{10}P_8$

14. $_6P_4$

15. $_7C_2$

16. $_{10}C_8$

17. There are 12 pictures to choose from to hang on your wall. In how many different ways can you arrange any 4 pictures on the wall?

18. There are 20 students in your class. If the teacher makes a group of 4 students, how many different possibilities are there?

19. The two-way table shows the results of a football team's games over the last five seasons and whether the roof was open or closed.

a. How many games did the team win?

b. How many games did the team lose with a closed roof?

c. Find and interpret the sum of the entries in each row and column.

	Roof Open	Roof Closed	Total
Team Won	25	7	
Team Lost	8	0	
Total			

d. What percent of the open roof games were won?

20. You randomly survey students in a school about their pet preference. The results are shown in the tally sheets.

a. Make a two-way table including the totals of the rows and columns.

b. What percent of male students prefer dogs?

c. What percent of female students prefer dogs?

d. Based on your answers to parts b & c, do you think gender affects pet preference?

Female Students

Pet	Tally
Dogs	JHT JHT IIII
Cats	JHT JHT JHT JHT

Male Students

Pet	Tally
Dogs	JHT JHT JHT II
Cats	JHT III

	Female	Male	Total
Dogs			
Cats			
Total			

21. Make a box-and-whisker plot for the data. Don't forget to label the number line!!

The ages of the members of a recreational volleyball team are: 21, 24, 28, 18, 25, 30, 50, and 32.

Minimum: _____   Maximum: _____   Q1: _____   Q2: _____   Q3: _____