Algebra 2 11.1-11.3 Review Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Evaluate:

1. 11P5 2.  3.  4. 10P3 5.  6. 



7. Determine the number of 3 letter “words” that can be made from RICHARD.



8. Determine the number of 4 letter “words” that can be made from the word MONDAY.



9. If there are 5 people in a race, how many ways can they finish?



10) How many ways can there be a first, second, and third place?



11. If there are 7 people in a race, how many ways can they finish?



12) How many ways can there be a first, second, and third place?



In 13-17, evaluate.

13. 13C4 14. 6C5 15.  16.  17. 3(20C5)



18. Zip Codes are 5 digits. The 1st number has to be 0, and the last number can’t be 0. How many zip codes are possible?



19. Because of the growth in America, the 1st number can now be a 0 or 1. How many numbers are possible?



20. How many times can Big Al take out Melissa if there are 3 appetizers, 5 entrees, 6 drinks, and 3 desserts at his favorite restaurant?



21. Each car dealer offers 7 models, with or without air conditioning, in 4 colors. How many different cars are available?



22. If the P(A) = .4, find P(not A).



23. In a survey of a group of 60 families, it is found that 38 families own a dog, 45 own a cat, and 26 own both a dog and a cat. What is the probability that a randomly selected family owns neither a dog or a cat? (HINT: DRAW A VENN DIAGRAM!)



24) The following is the sample space for rolling a 6 sided die and spinning a spinner with 3 colors (red, yellow, blue). 1R 2R 3R 4R 5R 6R



1Y 2Y 3Y 4Y 5Y 6Y



1B 2B 3B 4B 5B 6B



a) Find the probability of rolling an even number AND spinning the color yellow.



b) Find the probability of rolling an even number OR spinning the color yellow.

