Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Review for Probability Test 7b**



22.5 What is the **complement** of P(multiple of 8) from #20 above?



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***\*\* Remember: Compound Events: find the probability of each event and multiply!***

*******More Practice:*

1. 

 PAGE 2

1. 

4.

5.

 PAGE 3

6.

 b. P(ham, American) =

 c. Probability of ordering a sandwich with white bread, turkey and provolone cheese?

*Determine if the following events are* ***independent*** *or* ***dependent.*** *Then find the* ***probability.***

### 7. All of the letters that spell MISSISSIPPI are put into a bag.

### What is the probability of selecting a vowel, and then after replacing the letter, also drawing an S?

***Dependent or Independent? Probability:***

### 8. Using a standard deck of cards, what is the probability of selecting a red card, without replacement, and then selecting a heart card?

***Dependent or Independent? Probability:***

### 9. If you roll a die three times, what is the probability of rolling only even numbers?

***Dependent or Independent? Probability:*** PAGE 4

10. There are 4 black marbles and 2 white marbles in a bag. What is the probability of choosing a black marble, not replacing it, then choosing a white marble?

***Dependent or Independent? Probability:***

11. How many possible outcomes are there for a locker combination that has a 3 number code?

12. How many possible outcomes are there for a combination that involves the one letter followed by two numbers?

13. a) How many possible outfit options are there if you are choosing between a red, blue and gray shirt, jeans or shorts, and sneakers or flip flops?

b) What is the probability of picking an outfit with a red shirt?

**Permutations:**

14. There are five finalists in the Mr. Universe pageant. In how many ways may the judges choose a winner and a first runner-up

15. A multiple choice test consists of 15 questions, each with answers (a), (b), (c), (d), and (e). In how many ways could a student fill in the answers if they answer every question?

16. In how many ways could five people line up to get on a bus?

17. How many rearrangements are there of the letters in the word “great?”

18. Evaluate: 4! 19. Evaluate: $\frac{5!}{3!}$ 20. Evaluate: 6P3  PAGE 5

21. Create a box plot using the data for the heights in inches of students in middle school.

 60 55 54 62 63 61 62 60 61

Five Number Summary:

22. Harry rolled the number cube and recorded his results in the table.

1. What is the experimental probability of rolling a 2?
2. What is the theoretical probability of rolling a 2?
3. If Harry were to roll the die 144 times, predict how many times he would land on the number 5, using his experimental probability.

23. Solve for x: 5(x+2) + 3x = 26

24. Is the number $\frac{3}{4}$ rational, irrational, whole and/or counting. List all answers.

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