

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

## Advanced Functions - Review for Probability Quiz WS

Directions: Complete each problem. Then state the answer from the ANSWER BANK.  
No answer will be repeated.

- |               |              |
|---------------|--------------|
| A. 0.147      | H. 0.215     |
| B. 93,024     | I. 4,989,600 |
| C. 0.088      | J. 0.191     |
| D. 1,365      | K. 0.278     |
| E. 150        | L. 0.481     |
| F. 0.061      | M. 0.350     |
| G. 20,442,240 | N. 0.030     |

- \_\_\_\_\_ 1. Louise's wardrobe consists of 5 shirts, 5 pairs of pants, and 6 pairs of shoes. How many outfits can she assemble from these items.
- \_\_\_\_\_ 2. How many pass-codes can be formed if there must be 7 characters with 2 letters that can repeat and 5 numbers that cannot repeat.
- \_\_\_\_\_ 3. Find the number of distinct arrangements for letters in the word "information."
- \_\_\_\_\_ 4. Karen is in charge of listing the first, second, third, and fourth place finishers in a race with 19 contestants on a bulletin board. How many different ways can she make the list?
- \_\_\_\_\_ 5. Harry is choosing 4 library books from a selection of 15 books for a research paper. How many ways can Harry select the books?
- \_\_\_\_\_ 6. A basket contains 4 apples, 7 oranges, 4 pears, and 5 peaches. If one is selected at random, what is the probability that an orange was selected?
- \_\_\_\_\_ 7. A bag of golf tees contains 20 red, 17 blue, 20 yellow, 30 green, 19 orange, 23 white, and 28 black tees. What is the probability that if you choose a tee from the bag at random, you will choose a green tee?
- \_\_\_\_\_ 8. Kevin has a box of writing utensils that contains 6 pencils, 6 crayons, 4 pens, and 3 markers. He selects two utensils at random. What is the probability that he selected two crayons?
- \_\_\_\_\_ 9. A dart is thrown at the round dart board pictured below. What is the probability that the dart lands *inside* the square but *outside* the circle (i.e., the "corners")?

side = 6



- \_\_\_\_\_ 10. Suppose you have a box with 2 blue marbles, 4 red marbles, and 6 yellow marbles. You are going to pull out one marble, then, without replacement, draw another marble. What is the probability of pulling out a red marble and then a blue marble?
- \_\_\_\_\_ 11. A magician asks his helper to draw a card from a standard deck of 52 playing cards. The card is replaced and the deck shuffled. The magician then asks the helper to draw a second card. What is the probability that the first card was a Jack, and the second card was a number less than 7?
- \_\_\_\_\_ 12. The local meteorologist says there's a 30% chance of snow for Saturday, Sunday, and Monday. Since you have a busy weekend planned, but you'd prefer *not* to attend school on Monday, you'd like to know the probability that there will be no snow on Saturday and Sunday, but snow on Monday?
- \_\_\_\_\_ 13. Two dice are tossed: what is the probability that the sum will be 8 or 6?
- \_\_\_\_\_ 14. A single card is to be drawn from a standard deck of playing cards. What is the probability that the card is a odd number or Diamond?