

AP* Statistics Quiz A – Chapter 14

Name _____

Do # 2 only

1. Five multiple choice questions, each with four possible answers, appear on your history exam. What is the probability that if you just guess, you
 - a. get none of the questions correct?
 - b. get all of the questions correct?
 - c. get at least one of the questions wrong?
 - d. get your first incorrect answer on the fourth question?

2. The Masterfoods company manufactures bags of Peanut Butter M&M's. They report that they make 10% each brown and red candies, and 20% each yellow, blue, and orange candies. The rest of the candies are green.
 - a. If you pick a Peanut Butter M&M at random, what is the probability that
 - i. it is green?
 - ii. it is a primary color (red, yellow, or blue)?
 - iii. it is not orange?

 - b. If you pick four M&M's in a row, what is the probability that
 - i. they are all blue?
 - ii. none are green?
 - iii. at least one is red?
 - iv. the fourth one is the first one that is brown?

 - c. After picking 10 M&M's in a row, you still have not picked a red one. A friend says that you should have a better chance of getting a red candy on your next pick since you have yet to see one. Comment on your friend's statement.