

Name _____

Date _____

Multiplication Rule of Probability - Independent Practice Worksheet

Complete all the problems.

1. Holly is going to draw two cards from a standard deck without replacement. What is the probability that the first card is a king and the second card is an ace?
2. Thomas has a box with 4 black color bottles and 8 gray color bottles. Two bottles are drawn without replacement from the box. What is the probability that both of the bottles are gray?
3. A jar contains colored stones that are 4 pink stones, 9 orange stones and 5 green stones. Ryan picks one stone, records its color and puts it back in the jar. Then he draws another stone. What is the probability of taking out an orange stone followed by the green stone?
4. Henry has 3 black shirts and 7 blue shirts in his wardrobe. Two shirts are drawn without replacement from the wardrobe. What is the probability that both of the shirts are black?
5. Andrew has a box which contains 4 pink blocks, 5 yellow blocks and 6 green blocks. He picks one block, records its color and puts it back in the box. He then draws another block. What is the probability of taking out a yellow block followed by the pink block?
6. Anna has 2 purple lipsticks, 3 red lipsticks and 3 pink lipsticks in her kit. She picks one lipstick, record its color, puts it back in the kit and draws another lipstick. What is the probability of taking out a purple lipstick followed by the red lipstick?
7. Jordan has 9 blue balls, 6 red balls and 5 brown balls in a box. Two balls are drawn without replacement from the box. What is the probability that both of the balls are brown?
8. Bella has 7 green beads, 10 yellow beads and 3 white beads in a pouch. Two beads are drawn without replacement from the pouch. What is the probability that both of the beads are yellow?
9. Finn has 4 pairs of black shoes and 4 pairs of brown shoes on his shoe rack. He picks one pair of shoes, record its color, puts it back on the rack. He then draws another shoe. What is the probability of taking out a black shoe followed by the brown shoe?
10. Caleb has 7 black caps, 4 yellow caps, and 9 blue caps in his wardrobe. Two caps are drawn without replacement from the wardrobe. What is the probability that both of the caps are blue?

