

Probability of Compound Events Practice**READ DIRECTIONS FIRST!!! ☺**

For each problem, determine the probability and decide if the situation is independent or dependent by circling the correct type. **Show your probability as a fraction and then a percent.** (you don't have to reduce the fraction since we are converting it to %) You must round all percentages to nearest tenth.

1. You have a standard deck of cards. What is the probability of picking a diamond and then a spade without replacing the first card?

independent or dependent

2. You have a standard deck of cards What is the probability of picking a heart, a diamond and then a Jack replacing the card each time?

independent or dependent

3. There is a bag of chips: six chips are blue, 3 white, 4 red, and 7 green. What is the probability that you select a white chip, a green chip, and then another white chip without replacing each chip?

independent or dependent

4. You have a standard deck of cards.

- a) What is the probability of drawing two cards and getting both hearts? (you have both cards in your hand)

independent or dependent

- b) What are the **odds in favor** of drawing the two hearts? (you don't have to simplify this answer)

5. In the bowl of Halloween candy you have 12 Snickers, 16 Twizzlers, 5 milk duds, and 8 Skittles. You take three pieces of candy.

a) What is the probability of first pulling two Snickers and then a Twizzler?

independent or dependent

b) What are the odds against pulling 2 snickers and 1 twizzler? (you don't have to simplify this answer)

6. You spin a spinner 3 times that has twelve equal sections numbered 1-12.

a) What is the probability of spinning three even numbers?

independent or dependent

b) What are the odds in favor of spinning three even numbers?

c) If you spin it four times, what is the probability of spinning a multiple of 4, a prime number, a one, and then an odd number?

independent or dependent

d) What are the odds against spinning a multiple of 4, a prime number, a one, and then an odd number? (you don't have to simplify this answer)