

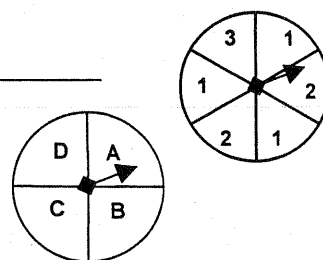
**Probability with Compound Events (Independent and Dependent)  
Practice**

Describe the events by writing **I** for *independent event* or **D** for *dependent event*.

1. Ann draws a colored toothpick from a jar. Without replacing it, she draws a second toothpick. \_\_\_\_\_
2. John rolls a six on a number cube and then flips a coin that comes up heads. \_\_\_\_\_
3. Susie draws a card from a deck of cards and replaces it. She then draws a second card. \_\_\_\_\_
4. Seth draws a colored tile from a bag, replaces it; draws a second tile from the bag, replaces it; and then draws a tile a third time from the bag. \_\_\_\_\_
5. You draw a red marble from a bag, and then another red marble (without replacing the first marble)? \_\_\_\_\_

Using the two spinners, find each **compound** probability.

6. P(A and 2) \_\_\_\_\_
7. P(D and 1) \_\_\_\_\_
8. P(B and 3) \_\_\_\_\_
9. P(A and not 2) \_\_\_\_\_

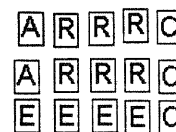


A box contains 3 red marbles, 6 blue marbles, and 1 white marble. The marbles are selected at random, one at a time, and are **not replaced**. Find each **compound** probability.

10. P(blue and red) \_\_\_\_\_
11. P(blue and blue) \_\_\_\_\_
12. P(red and white and blue) \_\_\_\_\_
13. P(red and red and red) \_\_\_\_\_
14. P(white and red and white) \_\_\_\_\_

Suppose that two tiles are drawn from the collection shown at the right. The first tile is replaced before the second is drawn. Find each **compound** probability.

15. P(A and A) \_\_\_\_\_
16. P(R and C) \_\_\_\_\_
17. P(A and not R) \_\_\_\_\_

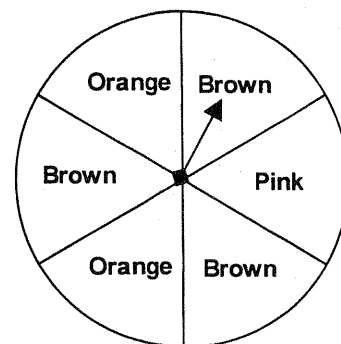


Suppose that two tiles are drawn from the same collection shown above. The first tile is **not** replaced before the second is drawn. Find each **compound** probability.

18. P(A and A) \_\_\_\_\_
19. P(R and C) \_\_\_\_\_
20. P(A and not R) \_\_\_\_\_

Use the spinner to the right for the next two problems.

21. If you spin the spinner twice, what is the probability of spinning orange then brown? \_\_\_\_\_
22. If you spin the spinner twice, what is the probability of spinning brown both times? \_\_\_\_\_



23. Kevin had 6 nickels and 4 dimes in his pocket. If he took out one coin and then a second coin without replacing the first coin ---
  - (a) what is the probability that both coins were nickels? \_\_\_\_\_
  - (b) what is the probability that both coins were dimes? \_\_\_\_\_
  - (b) what is the probability that the first coin was a nickel and the second a dime? \_\_\_\_\_