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.

A	R	R	R	C
A	R	R	R	C
E	E	E	E	C

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?   _____

Orange   Brown
Brown   Pink
Orange   Brown
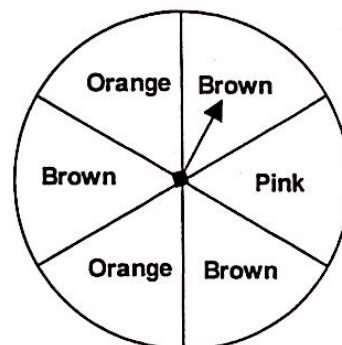
23. Kevin had 6 nickels and 4 dimes in his pocket. If he took out one coin and then a second coin without replacing the first coin ---
   (a) what is the probability that both coins were nickels?   _____

   (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?   _____

Practice Probability with Compound Events   1