▶ Extending Concepts

Comparing Probabilities **In Exercises 23–25, you have a standard deck of cards.**
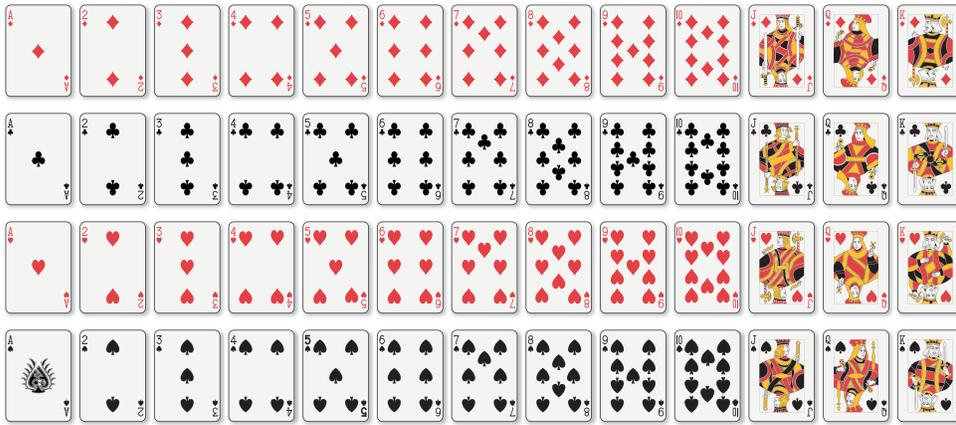
23. You randomly choose a card from the deck. Find the theoretical probability of choosing a card of each suit.

24. The bar graph shows the results of randomly choosing 1 card, recording its suit, and placing it back in the deck for 50 trials. Find the experimental probability of choosing a card of each suit.
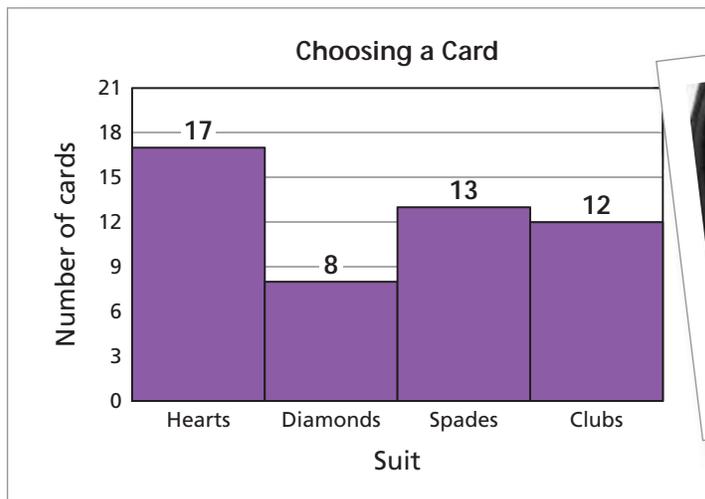
25. Compare the probabilities you found in Exercises 23 and 24.

Addition Rule **The probability that one of two events occurs is**

$$\text{Probability that either event occurs} = \begin{pmatrix} \text{probability} \\ \text{of event 1} \end{pmatrix} + \begin{pmatrix} \text{probability} \\ \text{of event 2} \end{pmatrix} - \begin{pmatrix} \text{probability of} \\ \text{both events} \end{pmatrix}.$$

In Exercises 26–28, you randomly choose a card from a standard deck of cards. Find the probability.

26. Choosing a heart or a 6

27. Choosing a black suit or a 2

28. Choosing a face card or a diamond