

## Now

In Chapter 13, you will apply the big ideas listed below and reviewed in the Chapter Summary on page 895. You will also use the key vocabulary listed below.

## Big Ideas

- 1 Finding probabilities of simple and compound events
- 2 Analyzing sets of data
- 3 Making and interpreting data displays

### KEY VOCABULARY

- outcome, p. 843
- event, p. 843
- probability, p. 843
- odds, p. 845
- permutation, p. 851
- combination, p. 856
- compound event, p. 861
- survey, p. 871
- sample, p. 871
- measure of dispersion, p. 876
- range, p. 876
- stem-and-leaf plot, p. 881
- frequency, p. 882
- histogram, p. 882
- box-and-whisker plot, p. 887
- interquartile range, p. 888
- outlier, p. 889

## Why?

You can use probability and data analysis to make predictions. For example, you can use data about a kicker's past successes in football games to find the chance of his success in the future.

### Animated Algebra

The animation illustrated below for Exercise 22 on page 848 helps you to answer this question: What is the probability that the kicker makes an attempted field goal?

The screenshot shows two panels from the 'Animated Algebra' software. The left panel displays a football field with a ball in the air and a 'Start' button. Below it, text reads: 'You need to find the number of field goals.' The right panel shows a control interface with three dropdown menus: 'Number of Kickers' set to 2, 'Number of Attempts' set to 20, and 'Speed of Attempts' set to 'Fast'. Below these is a bar graph with the legend 'A = Attempted' and 'M = Made'. The bar graph shows: A/A (6), M/A (5), A/M (5), and M/M (4). To the right of the bar graph is a 'Change Screen' dropdown menu set to 'Attempted' and a 'Kick Football' button. Below the bar graph, text reads: 'Click the drop-down menu to select the number of attempts.'

**Animated Algebra** at [classzone.com](http://classzone.com)

Other animations for Chapter 13: pages 845, 856, 875, and 887