

SKILL

85

Skills Readiness**Circle Graphs**

Circle graphs are used to present data as a fraction or percentage of a total. When you know the percentage of the data that a certain category represents, you can find the number of items by multiplying the percentage (converted to a decimal) times the total number.

Example: The circle graph shows the distribution of cars manufactured by certain makers found in a high school parking lot one day. The total number of cars is 350.

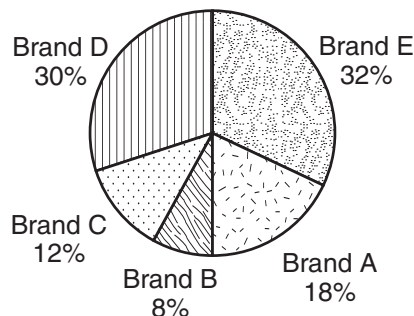
How many of the cars are made by Brand C?

$$\text{Multiply: } 0.12 \times 350 = 42$$

How many of the cars are made by Brand E or Brand A?

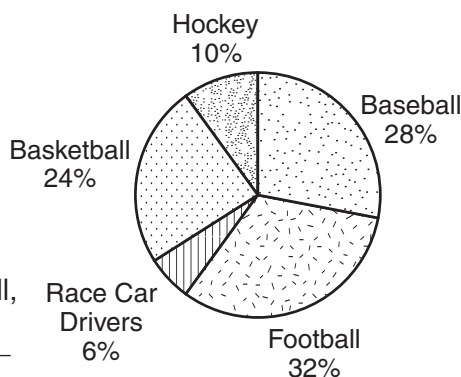
First add the two percentages ($32 + 18 = 50\%$), then multiply by the total.

$$0.50 \times 350 = 175$$

**Practice on Your Own**

John has a collection of 600 sports cards. The circle graph shows the distribution by sport of the cards John owns.

- How many of John's cards are baseball cards? _____
- How many of John's cards are not baseball cards? _____
- What percentage of John's cards are either baseball, basketball, or football cards? _____
- How many of John's cards are either baseball, basketball, or football cards? _____

**Check**

The circle graph shows the grade distribution of students who attended a high school football game. The total number of students who attended is 250.

- How many juniors attended the game? _____
- How many middle school students attended the game? _____
- What percentage of the students who attended the game were either freshmen or sophomores? _____
- How many of the students who attended the game were either freshmen or sophomores? _____

