

MAIN IDEA

- Sketch and analyze circle graphs.

BUILD YOUR VOCABULARY (pages 169–170)

A circle graph is used to data that are parts of a whole.

EXAMPLE Sketch Circle Graphs

1 ENTERTAINMENT The table shows how many hours a group of teenagers spent playing video games in one week. Sketch a circle graph to display the data. Remember to label each section of the graph and give the graph a title.

Time Spent Playing Video Games	
Time (h)	Percent
0–1	35
1–2	10
2–3	25
3 or more	30

- Write a fraction to represent each percent.

$$35\% = \frac{35}{100} \text{ or } \boxed{}$$

$$10\% = \frac{10}{100} \text{ or } \boxed{}$$

$$25\% = \frac{25}{100} \text{ or } \boxed{}$$

$$30\% = \frac{30}{100} \text{ or } \boxed{}$$

- Since $10\% = \boxed{}$, mark

of the circle for

“1–2 hours.” Since

$30\% = \boxed{}$, mark a section

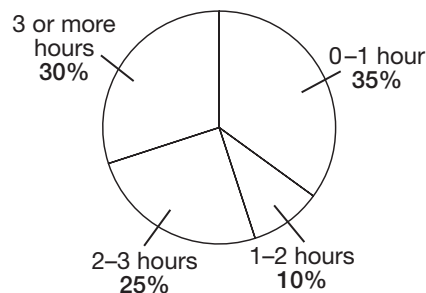
3 times as big as the section

for “1–2 hours” for “3 or more hours.” Since $25\% = \boxed{}$,

mark of the circle for “2–3 hours.” The remaining

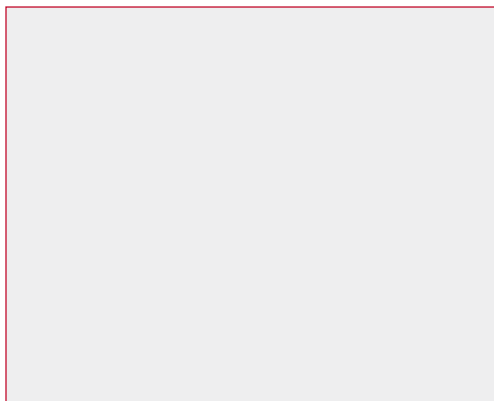
portion of the circle should be about 35% or of the circle for “0–1 hour.”

Time Spent Playing Video Games



Check Your Progress SPORTS

The table shows students' choices for favorite sport. Sketch a circle graph to display the data.



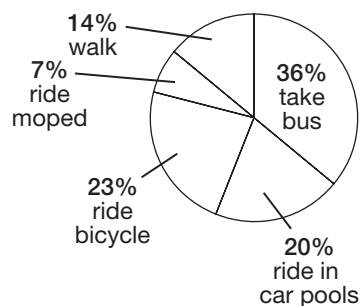
Favorite Sport	
Sport	Percent
Baseball	30
Tennis	19
Soccer	9
Hockey	10
Basketball	12
Football	20

EXAMPLES Analyze Circle Graphs**REMEMBER IT**

When you read and interpret a circle graph, it is helpful to remember that the percents of all the sections add up to 100%.

TRANSPORTATION The circle graph shows which method of transportation students use to get to Martin Luther King, Jr., Middle School.

Method of Transportation
Used by Students to
Arrive at School

**1** Which method of transportation do most students use?

The largest section of the graph is the section that represents . So, the method of transportation most students use is the .

- 3** Which two methods of transportation are used by the least amount of students?

The smallest sections of the graph are the sections that represent . So,

are the two methods of transportation used by the least amount of students.

FOLDABLES

ORGANIZE IT

In your Foldable, write the similarities and differences among circle graphs, bar graphs, and line graphs. Think about how each kind of graph is constructed.

Fraction	Percent	Decimal
$\frac{1}{2}$	→ 50%	→ 0.5

- 4** How does the number of students who ride mopeds to school compare to the number of students who take the bus?

The percent of students who ride a moped is and the percent of students who ride the bus is .

The number of students who take the bus is about times the number of students who ride a moped.

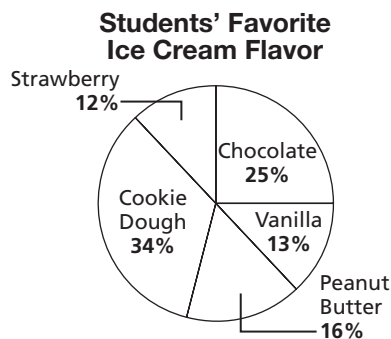
Check Your Progress

ICE CREAM The circle graph shows which flavor of ice cream students consider their favorite.

- a. Which flavor of ice cream do most students prefer?

- b. Which two flavors are the least favorite among these students?

- c. How does the number of students who prefer peanut butter ice cream compare to the number of students who prefer cookie dough ice cream?



HOMEWORK ASSIGNMENT

Page(s):

Exercises: