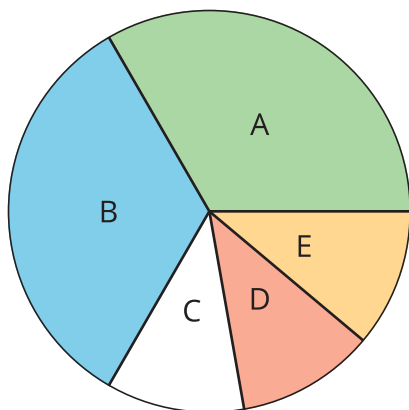


# Associations and Relative Frequency Tables

Let's explore relative frequency tables.

## 3.1 Estimate: Graph Percentage

What percentage of the graph is labeled C?



1. Record an estimate that is:

too low	about right	too high

2. Explain your reasoning.

## 3.2 Relative Frequency Tables

The relative frequency tables display data collected from 230 students.

1.

	participates in after school activity	no after school activity	total
arrives home within 2 hours of school dismissal	3%	40%	43%
arrives home 2 or more hours after school dismissal	42%	15%	57%
total	45%	55%	100%

- a. What percentage of students participate in after school activities? How many students participate in after school activities?
- b. What percentage of students arrive home 2 or more hours after dismissal? How many students arrive home 2 or more hours after school dismissal?

2.

	aspiring professional athlete	aspiring STEM career	total
prefer physical education	77%	23%	100%
prefer math	18%	82%	100%

- a. What percentage of students who prefer math aspire to have a career in STEM?
- b. What percentage of students who prefer physical education aspire to have a career in STEM?
- c. Is there evidence of an association between students' career aspirations and subject preference? Explain your reasoning.



3.

	9th grade	12th grade
curfew	95%	90%
no curfew	5%	10%
total	100%	100%

- Of the students in 12th grade, what percentage have a curfew?
- Of the students in 9th grade, what percentage have a curfew?
- Is there evidence of an association between students' grade level and whether they have a curfew? Explain your reasoning.

### 3.3 Associate Your Variables

- Invent a pair of variables that you think will have an association. Explain your reasoning.
- Invent a pair of variables that you think will not have an association. Explain your reasoning.