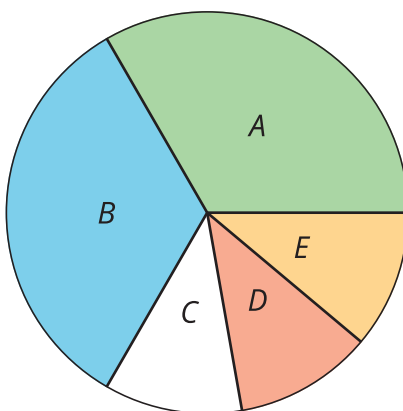


Lesson 3: Associations and Relative Frequency Tables

- Let's explore relative frequency tables

3.1: Estimation

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 afterschool activity	no afterschool 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. Are these two percentages close?

d. 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.