CASE #1

CONNECTED MATHEMATICS®3

Comparing Bits and Pieces
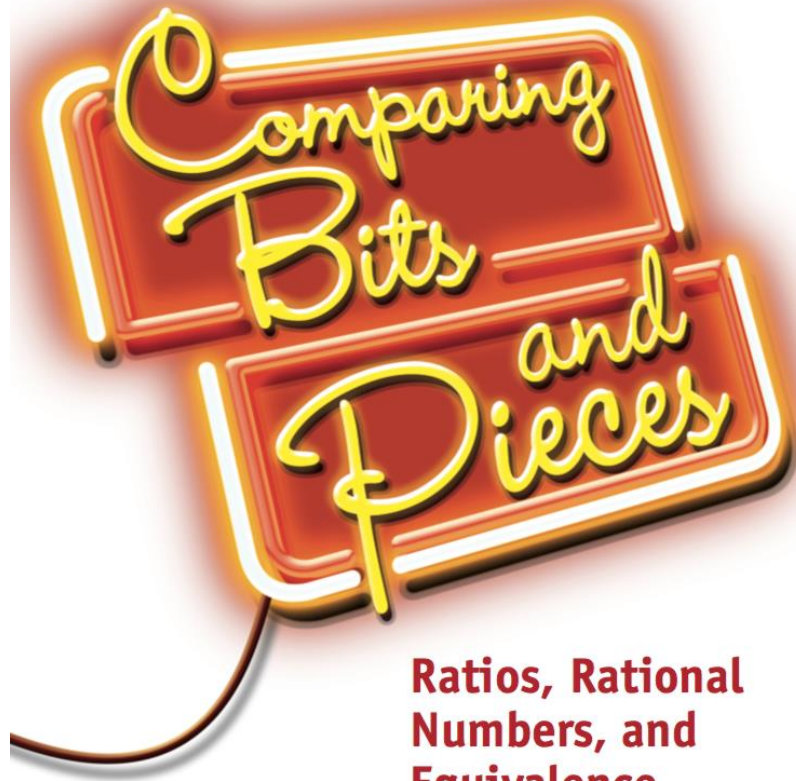
Ratios, Rational Numbers, and Equivalence

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PEARSON

1.1 Fundraising
Comparing With Fractions and Ratios

Students at a middle school are organizing three fundraising projects to raise money. The eighth grade will sell calendars. The seventh grade will sell popcorn. The sixth grade will sell posters.

Each grade picks a different goal for its fundraiser. The three grades are competing to see which grade will reach its fundraising goal first.

The fundraising goal for each grade is displayed on a banner in front of the principal's office.

Fundraising Goals

6th grade $300   7th grade $450   8th grade $150

- How can you compare the grades' fundraising goals?

Problem 1.1

A The students wrote some claims about the fundraising goals on slips of paper and gave them to the principal to read over the loudspeaker during the morning announcements. Decide whether each claim is true. Explain your reasoning.

> Markus:
> The sixth-grade goal is $150 more than the eighth-grade goal.

> Kimi:
> When the sixth graders meet their goal, they will have raised $\frac{2}{3}$ of the seventh-grade goal.

> Lakisha:
> The eighth-grade goal is half the sixth-grade goal.

> Andres:
> For every dollar the eighth graders plan to raise, the sixth graders plan to raise two dollars.

> Ben:
> For every $60 the sixth graders plan to raise, the seventh graders plan to raise $90.
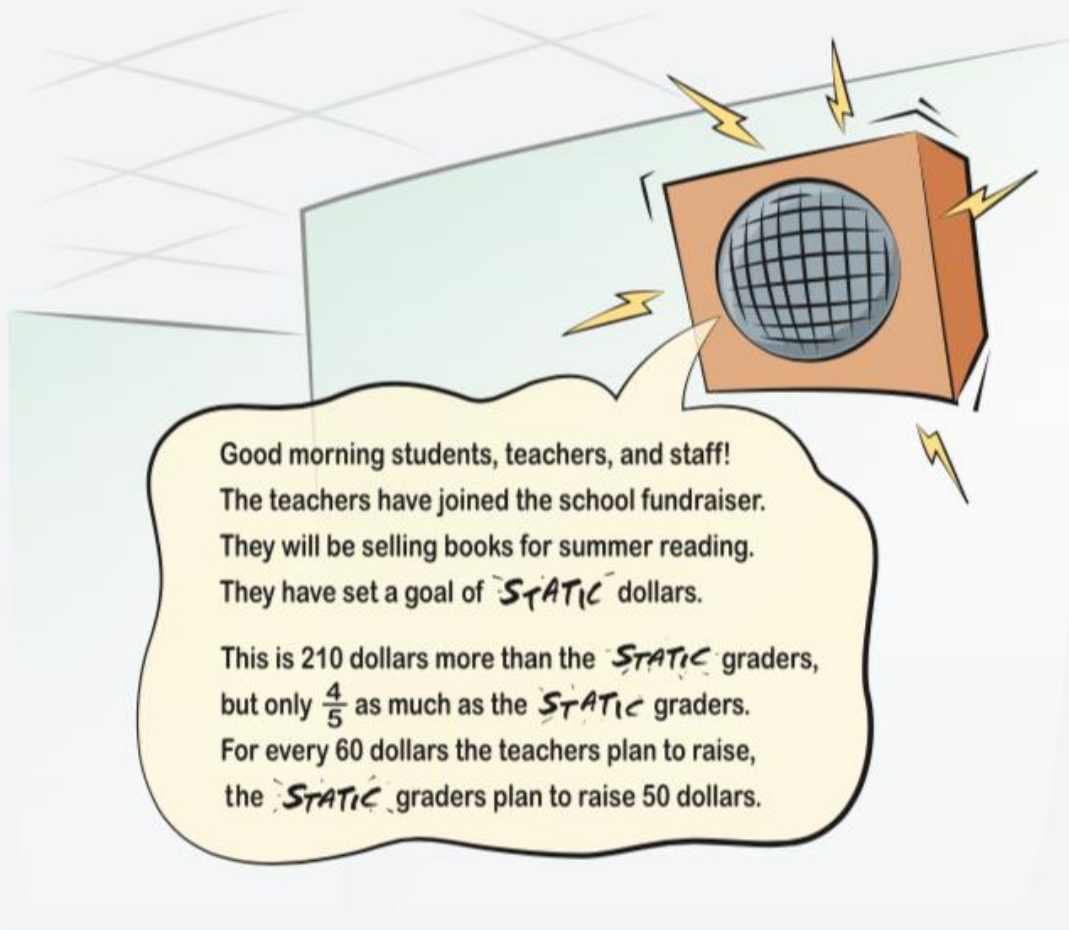
> Eliza:
> The sixth-grade goal is 200% of the eighth-grade goal.

> Chung:
> For every $3 the eighth grade plans to raise, the seventh grade plans to raise $1.

Problem 1.1 continued

B Write three more true comparison statements for the principal to read over the loudspeaker.

C On the first day of the fundraiser, the principal announces one more goal over the loudspeaker—the teachers' fundraising goal. The microphone is not working very well. What do you think the teachers' goal is?

Good morning students, teachers, and staff!
The teachers have joined the school fundraiser.
They will be selling books for summer reading.
They have set a goal of STATIC dollars.

This is 210 dollars more than the STATIC graders, but only $\frac{4}{5}$ as much as the STATIC graders. For every 60 dollars the teachers plan to raise, the STATIC graders plan to raise 50 dollars.

A C E Homework starts on page 27.