

Whose Quotient Is It Anyway?

Let's use different strategies to divide by one-digit divisors.



Warm-Up



eyes on teacher



We are a math community.

How can being part of a math community help you solve complex problems?

Activity

1

Towers of Guitars and Cans

- 1 Willis Tower is 1,452 feet tall. Andrea wonders how many of her guitars it would take to reach the top of Willis Tower. Andrea's guitar is 3 feet long. How many of her guitars, lined end to end, would Andrea need to equal the height of Willis Tower?



Show your thinking.

answer: _____

Towers of Guitars and Cans (continued)

- 2 Andrea made \$1,452 in 3 months recycling cans from her neighborhood. She made the same amount of money each month. How much money did Andrea make each month recycling cans?

 **Show your thinking.** _____

answer: _____

3 **Discuss** 

- What does the divisor represent in Problems 1 and 2? The quotient?
- How is your work in Problems 1 and 2 similar? Different?

Mystery Dividends

- 4 Without evaluating, use the digits 0–9 to make 3 different dividends to match the given place value of the quotient. Use each digit only once. You do not have to use all the digits.

Expression	Place value of quotient
_____ ÷ 4	tens
_____ ÷ 4	hundreds
_____ ÷ 4	thousands



Mystery Dividends (continued)

5

Discuss 

Share your work with another pair.

- How did you determine each dividend?
- Compare your expressions in the first row of the table. Whose expression has a greater number of tens in the quotient? How do you know?

