## Unit 5 Lesson 12: Dividing Decimals by Whole Numbers

### 1 Number Talk: Dividing by 4 (Warm up)

#### Student Task Statement

Find each quotient mentally.

### 2 Using Diagrams to Represent Division

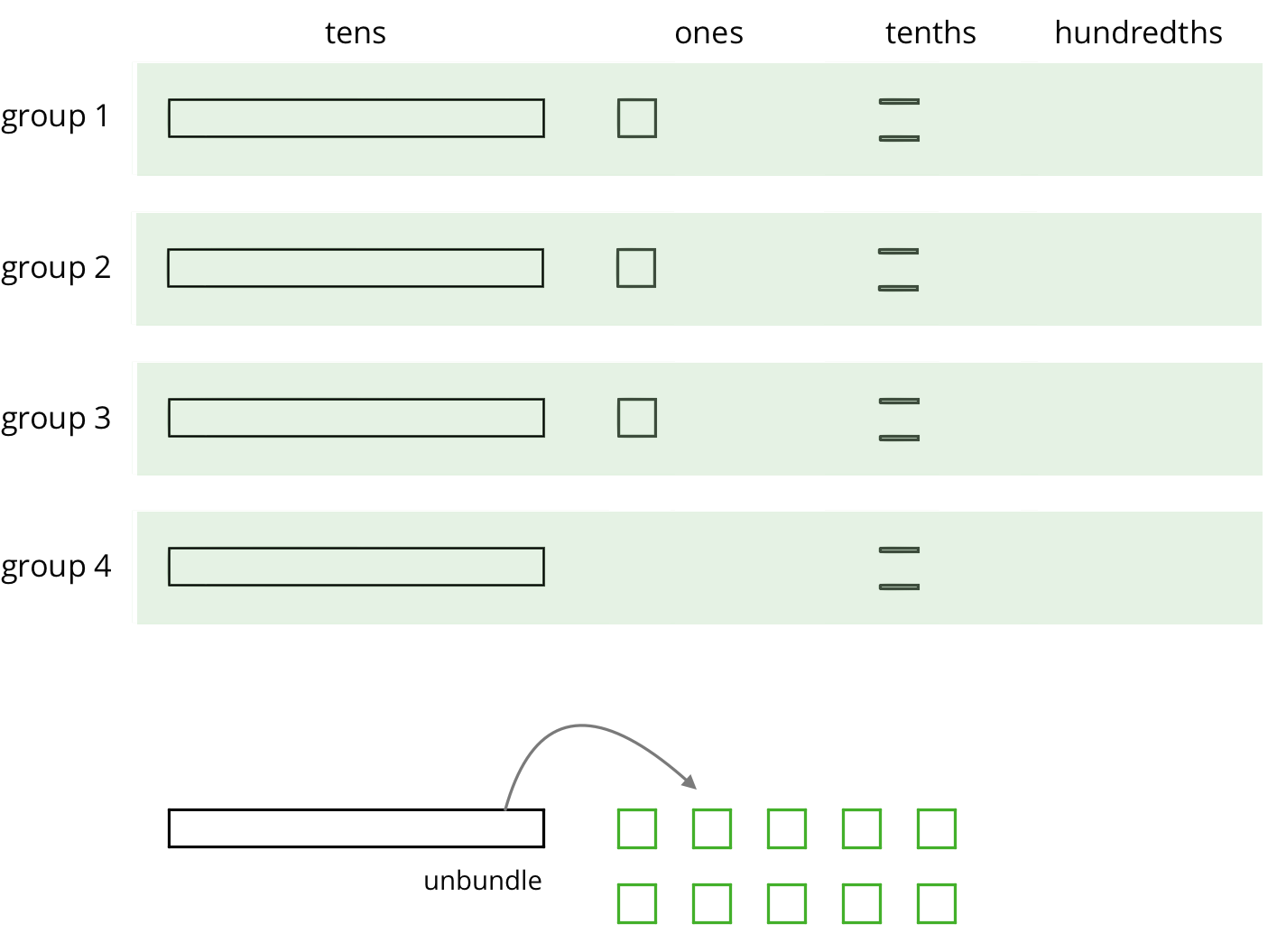
#### Student Task Statement

To find using diagrams, Elena began by representing 53.8.



She placed 1 ten into each group, unbundled the remaining 1 ten into 10 ones, and went on distributing the units.

This diagram shows Elena’s initial placement of the units and the unbundling of 1 ten.



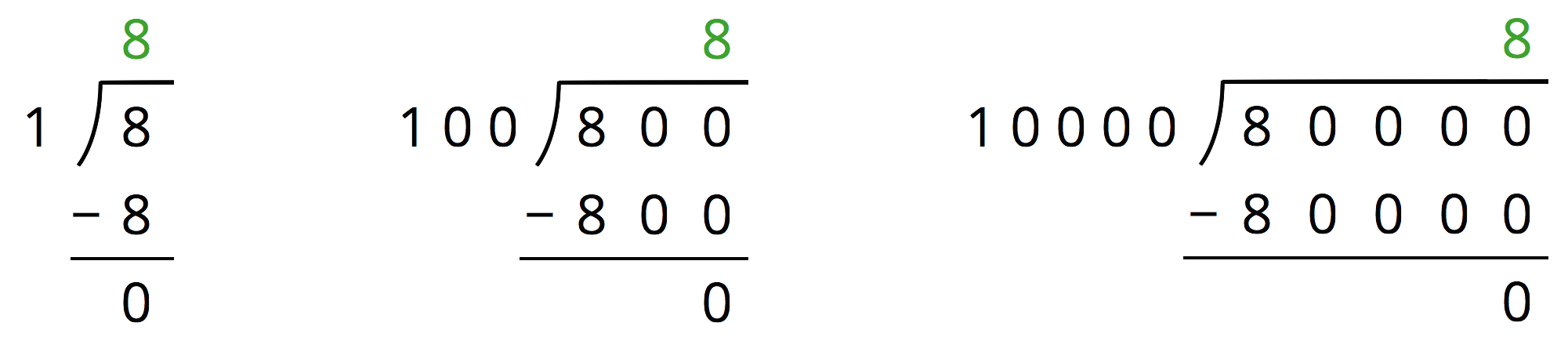
1. Complete the diagram by continuing the division process. How would you use the available units to make 4 equal groups?

* As the units get placed into groups, show them accordingly and cross out those pieces from the bottom. If you unbundle a unit, draw the resulting pieces.

1. What value did you find for ? Be prepared to explain your reasoning.
2. Use long division to find . Check your answer by multiplying it by the divisor 4.
3. Use long division to find . If you get stuck, you can draw diagrams or use another method.

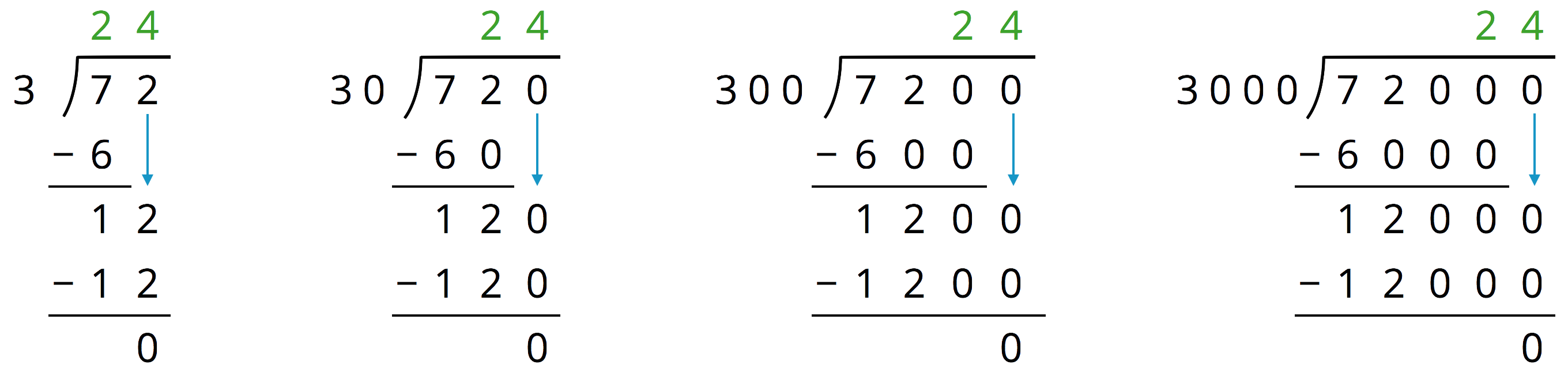
### 3 Dividends and Divisors

#### Images for Launch



#### Student Task Statement

Analyze the dividends, divisors, and quotients in the calculations, and then answer the questions.



1. Complete each sentence. In the calculations shown:
   * Each dividend is \_\_\_\_\_\_ times the dividend to the left of it.
   * Each divisor is \_\_\_\_\_\_ times the divisor to the left of it.
   * Each quotient is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the quotient to the left of it.
2. Suppose we are writing a calculation to the right of . Which expression has a quotient of 24? Be prepared to explain your reasoning.
3. Suppose we are writing a calculation to the left of . Write an expression that would also give a quotient of 24. Be prepared to explain your reasoning.
4. Decide which of the following expressions would have the same value as . Be prepared to share your reasoning.



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