## Unit 2 Lesson 8: Representing Ratios with Tables

## 1 How Is It Growing? (Warm up)

## Student Task Statement

Look for a pattern in the figures.

1. How many total tiles will be in:



## 2 A Huge Amount of Sparkling Orange Juice

## Images for Launch



## Student Task Statement

Noah's recipe for one batch of sparkling orange juice uses 4 liters of orange juice and 5 liters of soda water.

1. Use the double number line to show how many liters of each ingredient to use for different-sized batches of sparkling orange juice.
orange juice (liters)

soda water (liters)

2. If someone mixes 36 liters of orange juice and 45 liters of soda water, how many batches would they make?
3. If someone uses 400 liters of orange juice, how much soda water would they need?
4. If someone uses 455 liters of soda water, how much orange juice would they need?
5. Explain the trouble with using a double number line diagram to answer the last two questions.

## Activity Synthesis

$\cdot 100\left(\begin{array}{|c|c|}\hline \text { orange juice (liters) } & \text { soda water (liters) } \\ \hline 4 & 5 \\ \hline 8 & 10 \\ \hline 12 & 15 \\ \hline 16 & 20 \\ \hline 36 & 45 \\ \hline 400 & 500 \\ \hline 364 & 455 \\ \hline\end{array} \quad \cdot 100\right.$


## 3 Batches of Trail Mix

## Student Task Statement

A recipe for trail mix says: "Mix 7 ounces of almonds with 5 ounces of raisins." Here is a table that has been started to show how many ounces of almonds and raisins would be in different-sized batches of this trail mix.

| almonds (oz) | raisins (oz) |
| :---: | :---: |
| 7 | 5 |
| 28 |  |
| 3.5 | 250 |
| 56 |  |

1. Complete the table so that ratios represented by each row are equivalent.
2. What methods did you use to fill in the table?
3. How do you know that each row shows a ratio that is equivalent to 7 : 5? Explain your reasoning.
