Unit 3 Lesson 2: Representations of Equal Groups of Fractions

WU Number Talk: Three, Six, Nine, Twelve (Warm up)

Student Task Statement

Find the value of each expression mentally.

- 3×6
- 3×9
- 6×9
- 12×9

1 Card Sort: Expressions and Diagrams

Student Task Statement

Your teacher will give you a set of cards with expressions and diagrams.

1. Match each expression with a diagram that represents the same quantity.
2. Record each expression without a match.
3. Han started drawing a diagram to represent $7 \times \frac{1}{8}$ and did not finish. Complete his diagram. Be prepared to explain your reasoning.
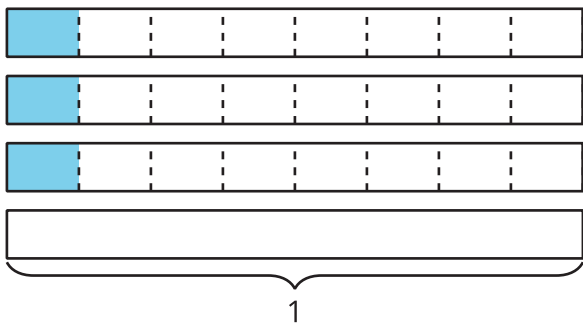
4. Choose one expression that you recorded earlier that didn't have a match.

   Draw a diagram that can be represented by the expression. What value do the shaded parts of your diagram represent?

2 Different Representations

Student Task Statement

1. a. Write a multiplication expression that represents the shaded parts of the diagram. Then, find the value of the expression.

   Diagram: Expression:

   Value:

$$1$$
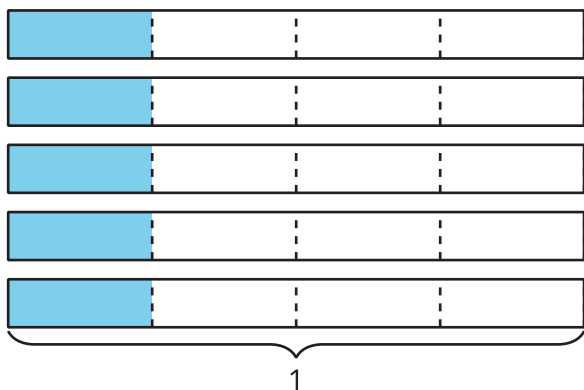
   b. Draw a diagram that the expression $6 \times \frac{1}{3}$ could represent. Then, find the value of the expression.

   Diagram: Expression: $6 \times \frac{1}{3}$

   Value:
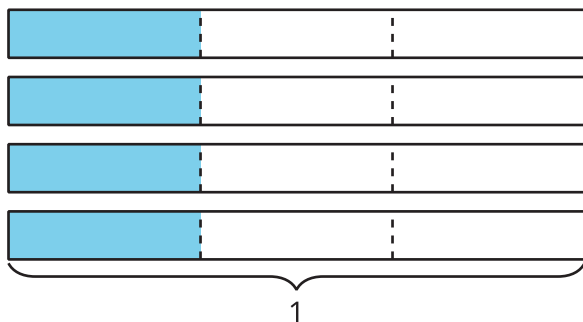
   c. Draw a diagram and write an expression that gives the value $\frac{7}{2}$.

   Diagram: Expression:

   Value: $\frac{7}{2}$

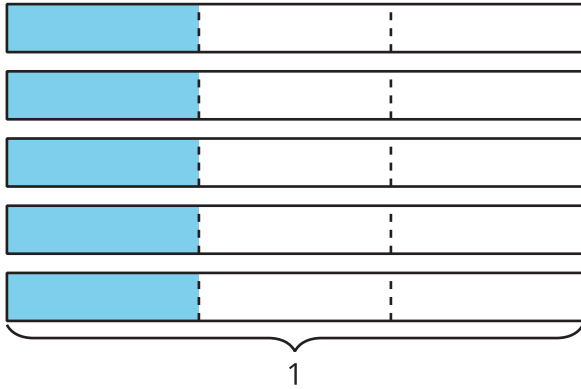2. To represent $4 \times \frac{1}{3}$, Diego drew this diagram:

$$1$$

   Elena drew this diagram:

| $\dfrac{1}{3}$ | $\dfrac{1}{3}$ | $\dfrac{1}{3}$ | $\dfrac{1}{3}$ |

Are they representing the same expression and value? Explain or show how you know.

Images for Activity Synthesis

A

1

B

1