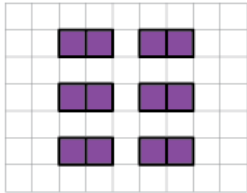


Activity 30 Assessment

Multiplication and Division with Unit Fractions

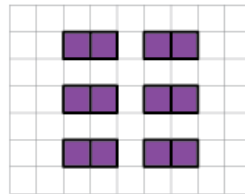
Multiplication and Division with Unit Fractions

Recognizes multiplication and division situations.



"I see multiplication: 12 parts of one half.
I also see division:
6 wholes divided into one-half parts."

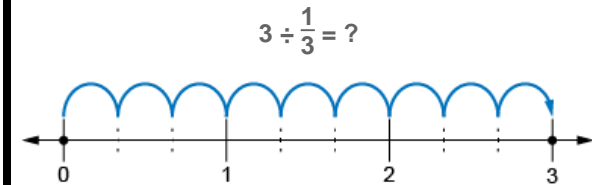
Writes an equation to represent a multiplication or division situation.



"I can represent this situation using a multiplication and a division equation."

$$12 \times \frac{1}{2} = 6; 6 \div \frac{1}{2} = 12$$

Models situations involving a whole partitioned into unit fractions in many ways.



"I used a number line from 0 to 3, partitioned each whole into thirds, then counted the thirds: 1 one-third, 2 one-thirds, 3 one-thirds, ..., 8 one-thirds, 9 one-thirds. $3 \div \frac{1}{3} = 9$."

Observations/Documentation

Activity 30 Assessment

Multiplication and Division with Unit Fractions

Multiplication and Division with Unit Fractions (cont'd)

Solves equations using addition or subtraction.

$$6 \times \frac{1}{5} = ?$$

"I added $\frac{1}{5}$ 6 times: $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{6}{5}$."

Solves using the properties of multiplication or division, extends to a variety of contexts.

Valentina and her abuela are making empanadas. They used $\frac{1}{3}$ of the recipe and the recipe called for 6 cups of flour. How much flour did they need?

"I found $\frac{1}{3}$ of 6 cups: $6 \times \frac{1}{3} = \frac{6}{3}$, or 2. They needed 2 cups of flour."

Solves multiplication and division problems flexibly, using a variety of strategies.

Ha-jun hikes $\frac{1}{2}$ km every day. How long will it be before Ha-jun has hiked 18 km?

$$18 \div \frac{1}{2} = ?$$

"If Ha-jun hikes $\frac{1}{2}$ km in one day, he will hike 1 km in 2 days. So, he will hike 18 km in $18 \times 2 = 36$ days."

Observations/Documentation