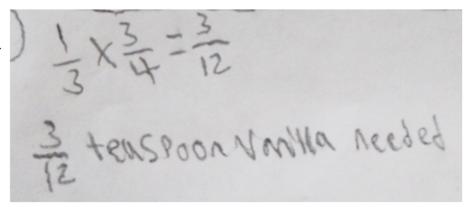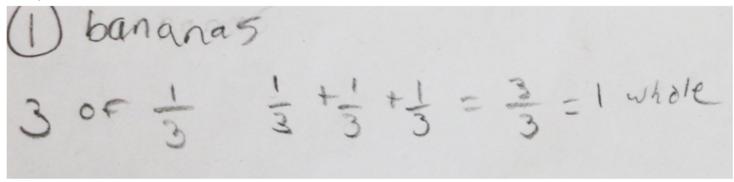# BANANA BREAD BAKE OFF
OPERATION G Use models to compose fractions using unit fractions as a form of multiplication

Sample 3

This student demonstrates successful use of the algorithm for multiplication (multiplying the numerators, and multiplying the denominators). It's possible that this student memorized the algorithm, allowing them to produce an accurate answer. As educators, we need to avoid the assumption that this strategy shows understanding of multiplication (it may, but we would need more information, such as a representation that shows meaning, or a conversation with the student, before we can make that evaluation).

$$\frac{1}{3} \times \frac{3}{4} = \frac{3}{12}$$

$\frac{3}{12}$ teaspoon Vanilla needed

Sample 4

① bananas

$3 \text{ of } \frac{1}{3} \qquad \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3} = 1 \text{ whole}$

This student shows repeated addition of thirds to compose one whole. Rather than dividing three bananas by three to get one banana, they took $\frac{1}{3}$ of each banana and added together to produce one banana. This is an interesting way of dealing with these quantities, and is a numeric way of showing a sub partitioning strategy. "3 of $\frac{1}{3}$" could be referring to three one-thirds bananas.

Sample 5

This representation shows a sub partitioning strategy. The student partitioned the number line into thirds, then each third again into thirds to show $\frac{1}{3}$ x $\frac{1}{3}$. The two top "jumps" are showing $\frac{1}{3}$ of two of the thirds, and the student moved or clumped these two ninths together on the bottom to show $\frac{2}{9}$.

← 95 Paces

← 2/9 hoped

You need $\frac{2}{9}$ of cup of sugar