

- c. With the remaining $\frac{3}{4}$ gallon of honey, Lila decided to bake some loaves of bread and several batches of cookies for her school bake sale. The bread needed $\frac{1}{6}$ gallon of honey and the cookies needed $\frac{1}{4}$ gallon. How much honey was left over? Support your answer using a diagram, numbers, and words.
- d. Lila decided to make more baked goods for the bake sale. She used $\frac{1}{8}$ lb less flour to make bread than to make cookies. She used $\frac{1}{4}$ lb more flour to make cookies than to make brownies. If she used $\frac{1}{2}$ lb of flour to make the bread, how much flour did she use to make the brownies? Explain your answer using a diagram, numbers, and words.

Mid-Module Assessment Task
Standards Addressed

Topics A–B

Understand place value.

- 5.NF.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)*
- 5.NF.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.*

Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency*. In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for each student is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what students CAN do now and what they need to work on next.

A Progression Toward Mastery

Assessment Task Item and Standards Assessed	STEP 1 Little evidence of reasoning without a correct answer. (1 Point)	STEP 2 Evidence of some reasoning without a correct answer. (2 Points)	STEP 3 Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)	STEP 4 Evidence of solid reasoning with a correct answer. (4 Points)
1(a) 5.NF.1	The student shows little evidence of clear reasoning and understanding, resulting with an incorrect answer.	The student shows evidence of beginning to understand addition fractions with unlike denominators, but the answer is incorrect.	The student has the correct answer, but is unable to show evidence accurately using diagrams, numbers, and/or words. Or, the student shows evidence of correctly modeling adding of fractions with unlike denominators, but resulted with an incorrect answer.	The student correctly: - Calculates $\frac{14}{12}$ gal, $1\frac{2}{12}$ gal, $1\frac{1}{6}$ gal, $\frac{7}{6}$ gal, or equivalent. - Illustrates the answer clearly in words, numbers, and a diagram.
1(b) 5.NF.1 5.NF.2	The student shows little evidence of using a correct strategy and understanding, resulting in the wrong answer.	The student shows evidence of beginning to understand subtracting fractions with unlike denominators, but is unable to obtain the correct answer.	The student has the correct answer, but the model either omitted or is unable to show evidence accurately using diagrams, numbers, and/or words. Or, the student shows evidence of correctly modeling subtracting fractions with unlike denominators but resulted with an incorrect answer.	The student correctly: - Calculates $\frac{5}{12}$ or $\frac{10}{24}$ gal. - Illustrates the answer clearly in words, numbers, and a diagram.



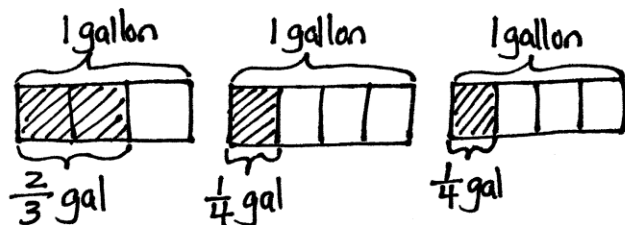
A Progression Toward Mastery

1(c) 5.NF.1 5.NF.2	The student shows little evidence of using a correct strategy and understanding, resulting in the wrong answer.	The student shows evidence of beginning to understand portions of the solution, such as attempting to add $\frac{1}{6}$ and $\frac{1}{4}$ and then subtract the result from $\frac{3}{4}$, but is unable to obtain the correct answer.	The student has the correct answer, but the model is either omitted, or the student is unable to show evidence accurately using diagrams, numbers, and/or words. Or, the student shows evidence of correctly modeling adding and subtracting fractions with unlike denominators, but resulted in an incorrect answer.	The student correctly: - Calculates $\frac{1}{3}$ gal or equivalent fraction, such as $\frac{4}{12}$ gal. - Models $\frac{1}{6} + \frac{1}{4}$ and $\frac{3}{4} - \frac{5}{12}$, or alternatively models $\frac{3}{4} - \frac{1}{6} - \frac{3}{4}$ using words, numbers, and a diagram.
1(d) 5.NF.1 5.NF.2	The student shows little evidence of using correct strategies, resulting in the wrong answer.	The student shows evidence of beginning to understand at least some of the steps involved, but is unable to obtain the correct answer.	The student has the correct answer, but the student does not show sound reasoning. Or, the student demonstrates all steps using appropriate models, but resulted in an incorrect answer.	The student correctly: - Calculates $\frac{3}{4}$ lb as the amount of flour used for brownies. - Diagrams and uses words and numbers to clearly explain the solution.

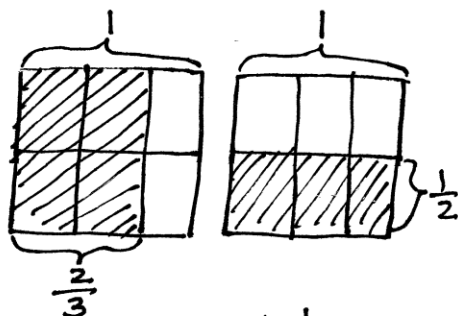
Name Jacqueline

Date _____

1. Lila collected the honey from 3 of her beehives. From the first hive she collected $\frac{2}{3}$ gallon of honey. The last two hives yielded $\frac{1}{4}$ gallon each.
- a. How many gallons of honey did Lila collect in all? Draw a diagram to support your answer.



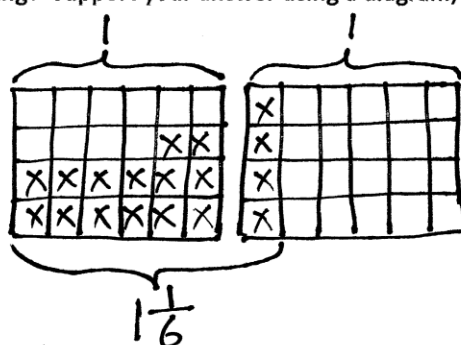
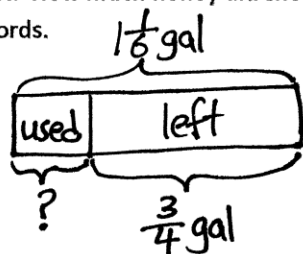
$$\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$$



$$\begin{aligned}\frac{2}{3} + \frac{1}{2} &= \frac{4}{6} + \frac{3}{6} \\ &= \frac{7}{6} \\ &= 1\frac{1}{6}\end{aligned}$$

Lila collected $\frac{7}{6}$ or $1\frac{1}{6}$ gallons in all.

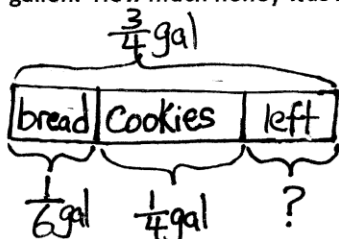
- b. After using some of the honey she collected for baking, Lila found that she only had $\frac{3}{4}$ gallon of honey left. How much honey did she use for baking? Support your answer using a diagram, numbers, and words.



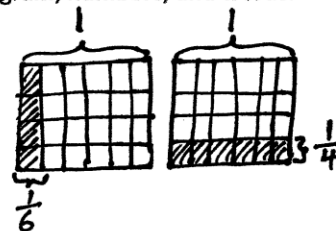
$$\begin{aligned}1\frac{1}{6} - \frac{3}{4} &= \frac{7}{6} - \frac{3}{4} \\ &= \frac{28}{24} - \frac{18}{24} \\ &= \frac{10}{24} \\ &= \frac{5}{12}\end{aligned}$$

Lila used $\frac{10}{24}$ or $\frac{5}{12}$ gallon for baking.

- c. With the remaining $\frac{3}{4}$ gallon of honey, Lila decided to bake some loaves of bread and several batches of cookies for her school bake sale. The bread needed $\frac{1}{6}$ gallon of honey and the cookies needed $\frac{1}{4}$ gallon. How much honey was left over? Support your answer using a diagram, numbers, and words.

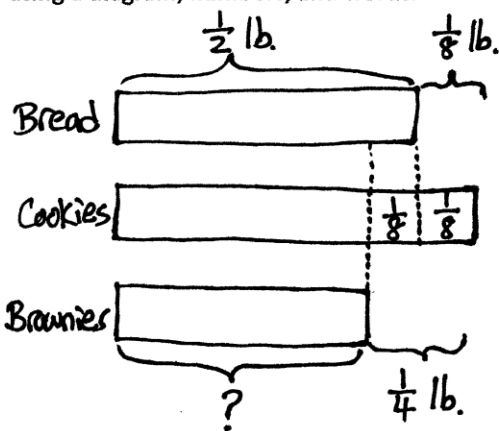


$$\begin{aligned} & \frac{3}{4} - \left(\frac{1}{6} + \frac{1}{4} \right) \\ &= \frac{3}{4} - \left(\frac{4}{24} + \frac{6}{24} \right) \\ &= \frac{3}{4} - \frac{10}{24} \\ &= \frac{18}{24} - \frac{10}{24} \\ &= \frac{8}{24} \\ &= \frac{1}{3} \end{aligned}$$



Lila had $\frac{1}{3}$ gallon left over.

- d. Lila decided to make more baked goods for the bake sale. She used $\frac{1}{8}$ lb less flour to make bread than to make cookies. She used $\frac{1}{4}$ lb more flour to make cookies than to make brownies. If she used $\frac{1}{2}$ lb of flour to make the bread, how much flour did she use to make the brownies? Explain your answer using a diagram, numbers, and words.



$$\begin{aligned} \frac{1}{2} - \frac{1}{8} &= \frac{4}{8} - \frac{1}{8} \\ &= \frac{3}{8} \end{aligned}$$

Lila used $\frac{3}{8}$ pound of flour to make the brownies.