Lesson 2

Represent Subtraction with Unlike Denominators

(I Can) use visual models to subtract fractions that have unlike denominators.

Florida's B.E.S.T.

- Fractions 5.FR.2.1
- Mathematical Thinking & Reasoning MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.6.1, MTR.7.1

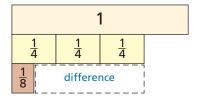
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Investigate

Mario fills a hummingbird feeder with $\frac{3}{4}$ cup of sugar water on Friday. On Monday, Mario sees that $\frac{1}{8}$ cup of sugar water is left. How much sugar water did the hummingbirds drink?

Materials ■ fraction strips ■ MathBoard

- **A.** Find $\frac{3}{4} \frac{1}{8}$. Place three $\frac{1}{4}$ -strips under the 1-whole strip on your MathBoard. Then place a $\frac{1}{8}$ -strip under the $\frac{1}{4}$ -strips.
- **B.** Find fraction strips, all with the same denominator, that fit exactly under the difference $\frac{3}{4} - \frac{1}{8}$.



C. Record the difference. $\frac{3}{4} - \frac{1}{8} =$

So, the hummingbirds drank _____ cup of sugar water.



MTR Complete tasks with 3.1 mathematical fluency.

How can you tell if the difference of the fractions is less than 1? Explain.

Draw Conclusions

1. Describe how you determined what fraction strips, all with the same denominator, would fit exactly under the difference. What are they?

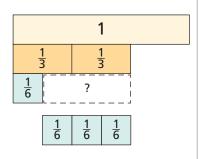
2. MTR Explain whether you could have used fraction strips with any other denominator to find the difference. If so, what is the denominator?

Make Connections

Sometimes you can use different sets of same-denominator fraction strips to find the difference. All the answers will be correct.

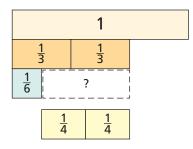
Solve. $\frac{2}{3} - \frac{1}{6}$

A Find fraction strips, all with the same denominator, that fit exactly under the difference $\frac{2}{3} - \frac{1}{6}$.



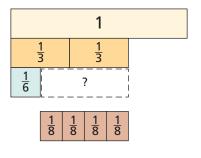
 $\frac{2}{3} - \frac{1}{6} = \frac{3}{6}$

B Find another set of fraction strips, all with the same denominator, that fit exactly under the difference $\frac{2}{3} - \frac{1}{6}$. Draw the fraction strips you used.



 $\frac{2}{3} - \frac{1}{6} =$

Find other fraction strips, all with the same denominator, that fit exactly under the difference $\frac{2}{3} - \frac{1}{6}$. Draw the fraction strips you used.



$$\frac{2}{3} - \frac{1}{6} =$$

While each answer appears different, all the answers

can be simplified to _____.



MTR Demonstrate understanding in multiple ways.

Which other fraction strips with the same denominator could fit exactly under the difference $\frac{2}{3} - \frac{1}{6}$?

Share and Show



Use fraction strips to find the difference.

1.

1									
	<u>1</u>	<u>1</u> 10	<u>1</u> 10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>		
	<u>1</u> 5		<u>1</u> 5		? ?				

$$\frac{7}{10} - \frac{2}{5} =$$

2.

1						
<u>1</u> 3	1/3					
1/4	?	i 				

$$\frac{2}{3} - \frac{1}{4} =$$
