Additional Practice 7-10 **Subtract Mixed Numbers**

Another Look!

The Plainville Zoo has had elephants for $2\frac{2}{3}$ years. The zoo has had zebras for $1\frac{1}{2}$ years. How many more years has the zoo had elephants?

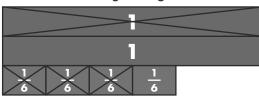
> Remember: You need a common denominator to subtract fractions.



Step 1

Write equivalent fractions with a common denominator. You can use fraction strips.

$$2\frac{2}{3}=2\frac{4}{6}$$



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

Step 2

Find the difference $2\frac{4}{6} - 1\frac{3}{6}$. Subtract the fractions. Then subtract the whole numbers.

$$\frac{4}{6} - \frac{3}{6} = \frac{1}{6}$$

$$2 - 1 = 1$$

So,
$$2\frac{2}{3} - 1\frac{1}{2} = 1\frac{1}{6}$$
.

The zoo has had the elephants $1\frac{1}{6}$ years longer.

In **1–9**, find each difference.

1.
$$4\frac{3}{5} = 4\frac{1}{15}$$

 $-2\frac{1}{3} = 2\frac{1}{15}$

2.
$$5$$
 $-3\frac{5}{6}$

3.
$$10\frac{5}{8}$$
 $-5\frac{3}{4}$

4.
$$5\frac{6}{7}$$
 $-1\frac{1}{2}$

5.
$$3 - 1\frac{3}{4}$$

6.
$$6\frac{5}{6}$$
 $-5\frac{1}{2}$

7.
$$7\frac{3}{10} - 2\frac{1}{5}$$

8.
$$9\frac{2}{3} - 6\frac{1}{2}$$

9.
$$8\frac{1}{4} - \frac{7}{8}$$

- **10.** To find the difference of $7 3\frac{5}{12}$, how do you rename the 7?
- 11. Higher Order Thinking Is it necessary to rename $4\frac{1}{4}$ to subtract $\frac{3}{4}$? Explain.

Use the table for **12–15**. The table shows the length and width of different bird eggs.

- **12.** How much longer is the Canada goose egg than the raven egg?
- **13.** How much wider is the turtle-dove egg than the robin egg?

Egg Sizes in Inches (in.)		
Bird	Length	Width
Canada goose	$3\frac{2}{5}$	$2\frac{3}{10}$
Robin	* <u>3</u>	<u>3</u>
Turtle dove	$1\frac{1}{5}$	9 10
Raven	$1\frac{9}{10}$	$1\frac{3}{10}$

- **14.** Write the birds in order from the shortest egg to the longest egg.
- **15. Model with Math** Write and solve an equation to find the difference between the length and width of a turtle-dove egg.



Assessment Practice

16. Choose the correct number from the box below to complete the subtraction sentence that follows.

$$1\frac{5}{6} - \frac{4}{9} = 1\frac{7}{3}$$

17. Choose the correct number from the box below to complete the subtraction sentence that follows.

$$9\frac{5}{12} - 3\frac{2}{3} = 5\frac{3}{4}$$