



Additional Practice 7-4

Subtract Fractions with Unlike Denominators

Another Look!

Beth wants to exercise for $\frac{4}{5}$ hour.
So far, she has exercised for $\frac{2}{3}$ hour.
What fraction of an hour does she have left to exercise?



Step 1

Find a common multiple.

Multiples of 5:

5, 10, 15, 20

Multiples of 3:

3, 6, 9, 12, 15

Since 15 is a multiple of both 5 and 3, use 15 as a common denominator.

Step 2

Write equivalent fractions.

$$\frac{4}{5} \times \frac{3}{3} = \frac{12}{15}$$

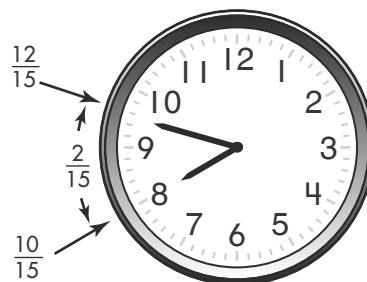
$$\frac{4}{5} = \frac{12}{15}$$

$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

$$\frac{2}{3} = \frac{10}{15}$$

Step 3

Subtract the numerators.



$$\frac{12}{15} - \frac{10}{15} = \frac{2}{15}$$

Beth has $\frac{2}{15}$ hour left.

In 1–8, find each difference.

1. $\frac{1}{3} = \frac{\square}{6}$
 $-\frac{1}{6} = \frac{\square}{6}$

2. $\frac{2}{3} = \frac{\square}{12}$
 $-\frac{5}{12} = \frac{\square}{12}$

3. $\frac{3}{5} = \frac{\square}{15}$
 $-\frac{1}{3} = \frac{\square}{15}$

4. $\frac{2}{9} = \frac{\square}{72}$
 $-\frac{1}{8} = \frac{\square}{72}$

5. $\frac{3}{4}$
 $-\frac{2}{5}$

6. $\frac{4}{3}$
 $-\frac{2}{5}$

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

8. $\frac{17}{18}$
 $-\frac{2}{3}$

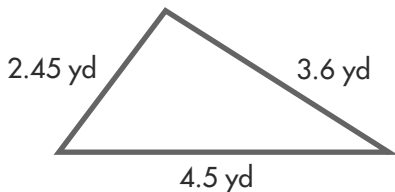


Use the table for **9** and **10**. The trail around Mirror Lake in Yosemite National Park is 5 miles long.

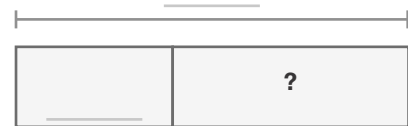
- 9.** What fraction describes how much more of the trail Jon hiked than Andrea hiked?
- 10.** What fraction describes how much more of the trail Callie hiked than Jon hiked?

Hiker	Fraction of Trail Hiked
Andrea	$\frac{2}{5}$
Jon	$\frac{1}{2}$
Callie	$\frac{4}{5}$

- 11. Critique Reasoning** Amy said that the perimeter of the triangle below is less than 10 yards. Do you agree with her? Why or why not?



- 12.** Eva had $\frac{7}{8}$ gallon of paint. Her brother Ivan used $\frac{1}{4}$ gallon to paint his model boat. Eva needs at least $\frac{1}{2}$ gallon to paint her bookshelf. Did Ivan leave her enough paint? Write an equation and fill in the bar diagram to solve.



- 13.** Paul's dad made a turkey pot pie for dinner on Wednesday. The family ate $\frac{4}{8}$ of the pie. On Thursday after school, Paul ate $\frac{2}{16}$ of the pie for a snack. What fraction of the pie remained?

- 14. Higher Order Thinking** Write a real-world problem in which you would subtract fractions with unlike denominators. Then, solve your problem.

Assessment Practice

- 15.** Choose the correct numbers from the box below to complete the subtraction sentence that follows.

$\frac{1}{2}$	$\frac{5}{14}$	$\frac{3}{7}$	$\frac{1}{7}$	$\frac{1}{14}$
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<input type="text"/>	$-\frac{3}{7} =$	<input type="text"/>
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- 16.** Choose the correct numbers from the box below to complete the subtraction sentence that follows.

$\frac{3}{20}$	$\frac{3}{5}$	$\frac{1}{20}$	$\frac{4}{5}$	$\frac{7}{9}$
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