

LESSON
3

Fraction Operations

Review for Mastery: Regrouping to Subtract Mixed Numbers

You can use fraction strips to regroup and subtract mixed numbers.

To find $3\frac{1}{4} - 1\frac{3}{4}$, first model the first mixed number in the expression.

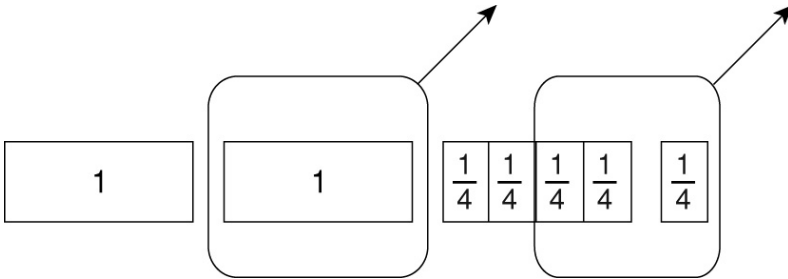


There are not enough $\frac{1}{4}$ pieces to subtract, so you have to regroup.

Trade one one-whole strip for four $\frac{1}{4}$ pieces, because $\frac{4}{4} = 1$.



Now there are enough $\frac{1}{4}$ pieces to subtract. Take away $1\frac{3}{4}$.



The remaining pieces represent the difference. Write the difference in simplest form.

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

Use fraction strips to find each difference. Write your answer in simplest form.

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

2. $3\frac{1}{6} - 1\frac{5}{6}$

3. $4\frac{3}{8} - 1\frac{7}{8}$

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

5. $5\frac{5}{12} - 2\frac{7}{12}$

6. $3\frac{3}{10} - 1\frac{9}{10}$

7. $5\frac{1}{8} - 1\frac{5}{8}$

8. $4 - 1\frac{1}{3}$

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

10. $2\frac{1}{8} - 1\frac{7}{8}$

11. $3 - 1\frac{1}{4}$

12. $6\frac{3}{8} - 2\frac{5}{8}$

16. $2\frac{5}{8}$ feet of paper

17. $\frac{2}{3}$ inch

18. $\frac{3}{4}$ mile

Practice C

1. $3\frac{1}{12}$

2. $6\frac{15}{26}$

3. $10\frac{13}{24}$

4. $2\frac{10}{21}$

5. $14\frac{23}{36}$

6. $12\frac{31}{35}$

7. $8\frac{11}{56}$

8. $2\frac{15}{28}$

9. $19\frac{41}{110}$

10. $1\frac{5}{24}$

11. $\frac{17}{24}$

12. $1\frac{11}{12}$

13. $3\frac{5}{8}$

14. $4\frac{5}{6}$

15. $2\frac{11}{12}$

16. $3\frac{23}{30}$ pounds

17. $9\frac{3}{8}$ pounds

18. $1\frac{19}{20}$ miles

Review for Mastery

1. $\frac{1}{2}$

2. $1\frac{1}{3}$

3. $2\frac{1}{2}$

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

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

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

7. $3\frac{1}{2}$

8. $2\frac{2}{3}$

9. $1\frac{3}{4}$

10. $\frac{1}{4}$

11. $1\frac{3}{4}$

12. $3\frac{3}{4}$

Challenge

$\frac{5}{6}$ A; $\frac{3}{8}$ E; $\frac{2}{3}$ J; $\frac{7}{10}$ M; $\frac{2}{5}$ R; $\frac{5}{9}$ S; $\frac{9}{10}$ Y

J A M E S

M A R Y

Problem Solving

1. $\frac{7}{8}$ pound more

2. $31\frac{9}{16}$ pounds more

3. $8\frac{7}{10}$ pounds more

4. $13\frac{7}{16}$ pounds more

5. $\frac{11}{16}$ pound more

6. $42\frac{9}{16}$ pounds more

7. C

8. G

Reading Strategies

1. $\frac{6}{8}$

2. Numbers may have to be regrouped.

3. When you subtract whole numbers, you regroup whole numbers. With fractions you regroup a whole number as a fraction.

Puzzles, Twisters & Teasers

1. $1\frac{1}{3}$

2. $\frac{4}{7}$

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

4. $1\frac{5}{8}$

5. $\frac{7}{12}$

THE STEAKS ARE
TOO HIGH

Answers for Lesson 4

Practice A

1. $k = 1\frac{1}{2}$

2. $m = 3\frac{5}{6}$

3. $p = \frac{7}{12}$

4. $n = 1\frac{1}{4}$

5. $y = 4\frac{1}{2}$

6. $d = 1\frac{3}{10}$

7. $q = 2\frac{1}{14}$

8. $z = 3\frac{1}{10}$