

LESSON

4

Fraction Operations**Practice A: Solving Fraction Equations: Addition and Subtraction**

Solve each equation. Write the solution in simplest form.

1. $k + 1\frac{1}{2} = 3$

2. $m - 2\frac{1}{3} = 1\frac{1}{2}$

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

4. $n + 3\frac{7}{8} = 5\frac{1}{8}$

5. $3\frac{1}{3} = y - 1\frac{1}{6}$

6. $2\frac{1}{5} + d = 3\frac{1}{2}$

7. $2\frac{1}{7} + q = 4\frac{3}{14}$

8. $z - 1\frac{2}{5} = 1\frac{7}{10}$

9. $f + \frac{2}{3} = 1\frac{1}{9}$

10. $b = 1\frac{5}{8} - \frac{3}{4}$

11. $t + 1\frac{1}{5} = 3\frac{3}{10}$

12. $3\frac{1}{2} + w = 5\frac{7}{12}$

13. $c - 8\frac{1}{5} = 10\frac{3}{10}$

14. $h + \frac{1}{3} = 2\frac{1}{6}$

15. $1\frac{5}{9} = g - 3\frac{5}{18}$

16. Joey beat Frank in the swim race by $2\frac{1}{10}$ minutes. Frank's time was $8\frac{3}{5}$ minutes. What was Joey's time in the race?

17. Sabrina bought 8 gallons of paint. After she painted her shed, she had $4\frac{1}{6}$ gallons left over. How much paint did Sabrina use on her shed?

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

9. $f = \frac{4}{9}$

10. $b = \frac{7}{8}$

7. $x = 2\frac{3}{4}$

8. $x = 3\frac{7}{10}$

11. $t = 2\frac{1}{10}$

12. $w = 2\frac{1}{12}$

13. $c = 18\frac{1}{2}$

14. $h = 1\frac{5}{6}$

15. $g = 4\frac{5}{6}$

16. $6\frac{1}{2}$ minutes

17. $3\frac{5}{6}$ gallons

Practice B

1. $x = 4\frac{13}{16}$

2. $z = 4\frac{5}{8}$

3. $n = 8\frac{2}{7}$

4. $a = 3\frac{5}{22}$

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

6. $r = \frac{9}{10}$

7. $q = 13\frac{19}{35}$

8. $p = 1\frac{3}{5}$

9. $c = 5\frac{3}{8}$

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

11. $14\frac{2}{3}$ inches

12. $2\frac{5}{8}$ miles

Practice C

1. $p = 1\frac{1}{15}$

2. $d = 20\frac{19}{20}$

3. $x = 15\frac{13}{24}$

4. $a = 5\frac{23}{44}$

5. $f = 18\frac{11}{50}$

6. $c = 3\frac{19}{24}$

7. $r = 5\frac{1}{10}$

8. $s = 7\frac{1}{10}$

9. $3\frac{1}{24}$ feet

10. $8\frac{1}{4}$ inches

Review for Mastery

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

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

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

4. $2\frac{11}{12}$

5. $x = 9\frac{1}{4}$

6. $x = 5$

Challenge

1. $2 \cdot \frac{7}{9} = \frac{14}{9} = 1\frac{5}{9}$

$1\frac{5}{9} + 12 = 13\frac{5}{9}$

$13\frac{5}{9} \div 2 = \frac{122}{18} = 6\frac{14}{18} = 6\frac{7}{9}$

$6\frac{7}{9} - \frac{7}{9} = 6$

2. $2 \cdot 3\frac{1}{4} = \frac{26}{4} = 6\frac{2}{4} = 6\frac{1}{2}$

$6\frac{1}{2} + 12 = 18\frac{1}{2}$

$18\frac{1}{2} \div 2 = \frac{37}{4} = 9\frac{1}{4}$

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

Problem Solving

1. $\frac{3}{4}$ of an hour

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

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

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

5. A

6. G

7. A

8. G

Reading Strategies1. Subtract $2\frac{1}{3}$ from both sides of the equation.2. To get m by itself.3. Regroup 5 as $4\frac{3}{3}$.4. Add $3\frac{2}{3}$ to both sides of the equation.

5. Add fractions and whole numbers.

6. Possible answer: Get the variable on one side of the equation, rename if needed, add or subtract fractions, and add or subtract whole numbers.