For use with pages 225-229

Find the sum or difference.

1.
$$\frac{12}{13} + \frac{12}{13}$$
 2. $\frac{1}{10} - \frac{9}{10}$

2.
$$\frac{1}{10} - \frac{9}{10}$$

3.
$$-\frac{13}{32} + \left(-\frac{13}{32}\right)$$
 4. $\frac{34}{43} - \left(-\frac{12}{43}\right)$

4.
$$\frac{34}{43} - \left(-\frac{12}{43}\right)$$

5.
$$-\frac{11}{30} - \left(-\frac{7}{30}\right)$$
 6. $-\frac{17}{50} + \frac{19}{50}$

6.
$$-\frac{17}{50} + \frac{19}{50}$$

7.
$$\frac{43}{100} - \left(-\frac{17}{100}\right)$$
 8. $\frac{9}{80} - \frac{51}{80}$

8.
$$\frac{9}{80} - \frac{51}{80}$$

9.
$$8\frac{7}{10} + 3\frac{9}{10}$$
 10. $5\frac{1}{7} - 6\frac{2}{7}$

10.
$$5\frac{1}{7} - 6\frac{2}{7}$$

11.
$$3\frac{1}{15} - 7\frac{11}{15}$$

12.
$$1\frac{2}{9} - 12\frac{7}{9}$$

13.
$$24\frac{17}{22} - 16\frac{5}{22}$$
 14. $\frac{4}{5} - \left(-3\frac{4}{5}\right)$

14.
$$\frac{4}{5} - \left(-3\frac{4}{5}\right)$$

15.
$$20\frac{5}{6} + \left(-18\frac{5}{6}\right)$$
 16. $-4\frac{11}{16} - \frac{15}{16}$

16.
$$-4\frac{11}{16} - \frac{15}{16}$$

Simplify the expression.

17.
$$\frac{7x}{20} + \frac{17x}{20}$$
 18. $\frac{19x}{28} + \frac{x}{28}$

18.
$$\frac{19x}{28} + \frac{x}{28}$$

19.
$$-\frac{9}{14x} + \frac{17}{14x}$$
 20. $-\frac{4x}{45} - \frac{41x}{45}$

20.
$$-\frac{4x}{45} - \frac{41x}{45}$$

21.
$$\frac{4}{x} - \frac{11}{x}$$

22.
$$\frac{7}{24x} + \left(-\frac{5}{24x}\right)$$

23.
$$\frac{11}{12x} - \left(-\frac{5}{12x}\right)$$

22.
$$\frac{7}{24x} + \left(-\frac{5}{24x}\right)$$
 23. $\frac{11}{12x} - \left(-\frac{5}{12x}\right)$ **24.** $\frac{8}{5x} + \frac{3}{5x} - \left(-\frac{4}{5x}\right)$

For use with pages 225-229

Evaluate the expression.

25.
$$\frac{1}{12} + \frac{5}{12} + \frac{11}{12}$$

26.
$$\frac{5}{8} + \frac{7}{8} + \left(-\frac{3}{8}\right)$$

27.
$$-\frac{9}{14} + \frac{3}{14} + \frac{5}{14}$$

28.
$$\frac{4}{7} - \left(-\frac{2}{7}\right) + \frac{5}{7}$$

29.
$$-\frac{7}{9} - \frac{4}{9} - \frac{2}{9}$$

30.
$$-\frac{9}{20} + \frac{11}{20} - \left(-\frac{3}{20}\right)$$

- **31.** You have a piece of wood that is $7\frac{3}{4}$ feet long. You want to cut one piece that is $3\frac{7}{12}$ feet long and one piece that is $4\frac{1}{12}$ feet long. Do you have enough wood? Explain.
- **32.** You run the 60-yard dash in $7\frac{9}{20}$ seconds. Your friend runs it in $6\frac{19}{20}$ seconds. How much faster is your friend's time?
- **33.** Three puppies weigh $1\frac{1}{16}$ pounds, $1\frac{3}{16}$ pounds, and $\frac{15}{16}$ pound. You are carrying all three in a basket. Find the total weight of the three puppies.

For use with pages 230-235

Find the sum or difference.

1.
$$\frac{7}{12} + \frac{7}{10}$$

1.
$$\frac{7}{12} + \frac{7}{10}$$
 2. $\frac{8}{9} + \left(-\frac{10}{21}\right)$ **3.** $-\frac{4}{17} + \frac{3}{5}$

3.
$$-\frac{4}{17} + \frac{3}{5}$$

4.
$$-\frac{3}{4} - \left(-\frac{5}{18}\right)$$

5.
$$-\frac{1}{6} - \frac{9}{22}$$

5.
$$-\frac{1}{6} - \frac{9}{22}$$
 6. $-\frac{11}{12} - \frac{7}{15}$ **7.** $\frac{9}{20} - \frac{3}{16}$

7.
$$\frac{9}{20} - \frac{3}{16}$$

8.
$$-\frac{5}{14} - \left(-\frac{9}{10}\right)$$

Evaluate the expression when $x = \frac{5}{6}$ and $y = -\frac{3}{10}$.

9.
$$x + y$$

10.
$$x - y$$

11.
$$y - x$$

12.
$$-y - x$$

Find the sum or difference.

13.
$$5\frac{2}{7} + 7\frac{1}{6}$$

14.
$$4\frac{5}{9} - 3\frac{2}{15}$$

15.
$$-2\frac{8}{9} + 2\frac{5}{6}$$

13.
$$5\frac{2}{7} + 7\frac{1}{6}$$
 14. $4\frac{5}{9} - 3\frac{2}{15}$ **15.** $-2\frac{8}{9} + 2\frac{5}{6}$ **16.** $-1\frac{5}{8} - \left(-2\frac{1}{5}\right)$

17.
$$1\frac{3}{4} - 4\frac{3}{14}$$

18.
$$-6\frac{3}{25} + 3\frac{1}{2}$$

19.
$$4\frac{9}{16} + \left(-3\frac{3}{10}\right)$$

17.
$$1\frac{3}{4} - 4\frac{3}{14}$$
 18. $-6\frac{3}{25} + 3\frac{1}{2}$ **19.** $4\frac{9}{16} + \left(-3\frac{3}{10}\right)$ **20.** $-1\frac{2}{3} - \left(-1\frac{4}{11}\right)$

For use with pages 230-235

Evaluate the expression when $x = -4\frac{1}{6}$ and $y = 1\frac{11}{16}$.

21.
$$x + y$$

22.
$$x - y$$
 23. $y - x$

24.
$$-y - x$$

Simplify the expression.

25.
$$-\frac{7x}{6} - \frac{x}{5}$$

26.
$$\frac{x}{8} + \frac{5x}{3}$$

25.
$$-\frac{7x}{6} - \frac{x}{5}$$
 26. $\frac{x}{8} + \frac{5x}{3}$ **27.** $-\frac{2x}{9} + \frac{7x}{15}$ **28.** $\frac{4x}{7} - \frac{8x}{5}$

28.
$$\frac{4x}{7} - \frac{8x}{5}$$

- **29.** A baby weighs $7\frac{1}{8}$ pounds at birth. After four months, the baby weighs $15\frac{2}{3}$ pounds. How much weight did the baby gain?
- **30.** In a bag of marbles, $\frac{2}{5}$ are red, $\frac{2}{7}$ are green, and the rest are blue. What fraction of the marbles are blue?
- **31.** An ice sculpture originally has a height of $74\frac{1}{4}$ inches. The ice sculpture begins to melt and after several hours, the height has decreased by $8\frac{7}{16}$ inches. What is the current height of the sculpture?