

FRACTIONS

THE WORKBOOK

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REDUCE FRACTIONS

Reduce fractions to lowest terms.

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

2) $\frac{6}{8} =$

3) $\frac{5}{10} =$

4) $\frac{8}{12} =$

5) $\frac{9}{12} =$

6) $\frac{15}{25} =$

7) $\frac{21}{28} =$

8) $\frac{18}{27} =$

9) $\frac{20}{30} =$

10) $\frac{18}{36} =$

11) $\frac{18}{30} =$

12) $\frac{48}{64} =$

13) $\frac{54}{63} =$

14) $\frac{22}{55} =$

15) $\frac{5}{30} =$

16) $\frac{45}{81} =$

17) $\frac{20}{40} =$

18) $\frac{11}{121} =$

EQUIVALENT FRACTIONS

Compare each set of fractions and write $<$, $>$, or $=$ in the box.

1) $\frac{2}{5} \square \frac{4}{10}$

2) $\frac{7}{8} \square \frac{21}{24}$

3) $\frac{3}{4} \square \frac{12}{16}$

4) $\frac{5}{9} \square \frac{10}{18}$

5) $\frac{1}{12} \square \frac{2}{7}$

6) $\frac{1}{3} \square \frac{3}{4}$

7) $\frac{1}{3} \square \frac{3}{5}$

8) $\frac{10}{16} \square \frac{5}{8}$

9) $\frac{7}{10} \square \frac{1}{8}$

10) $1\frac{1}{2} \square \frac{6}{4}$

11) $\frac{13}{5} \square 2\frac{3}{5}$

12) $3\frac{3}{7} \square \frac{4}{1}$

13) $4\frac{5}{9} \square \frac{12}{9}$

14) $5\frac{2}{3} \square 3\frac{2}{5}$

15) $\frac{1}{6} \square \frac{3}{8}$

16) $1\frac{1}{9} \square \frac{19}{8}$

17) $4\frac{3}{4} \square \frac{19}{4}$

18) $\frac{3}{9} \square \frac{21}{63}$

MIXED NUMBERS

Convert each mixed number into an improper fraction.

1) $1\frac{3}{4} =$

2) $6\frac{2}{5} =$

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

4) $1\frac{7}{9} =$

5) $3\frac{3}{11} =$

6) $2\frac{4}{9} =$

7) $4\frac{1}{7} =$

8) $7\frac{1}{6} =$

9) $5\frac{3}{13} =$

10) $3\frac{1}{8} =$

11) $9\frac{8}{10} =$

12) $2\frac{2}{3} =$

13) $4\frac{3}{8} =$

14) $3\frac{5}{6} =$

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

16) $5\frac{4}{5} =$

17) $10\frac{5}{6} =$

18) $6\frac{3}{10} =$

19) $7\frac{8}{9} =$

20) $4\frac{1}{9} =$

21) $3\frac{2}{3} =$

IMPROPER FRACTIONS

Convert each improper fraction into a mixed number.

1) $\frac{7}{3} =$

2) $\frac{9}{5} =$

3) $\frac{8}{5} =$

4) $\frac{17}{3} =$

5) $\frac{25}{7} =$

6) $\frac{23}{8} =$

7) $\frac{17}{9} =$

8) $\frac{31}{9} =$

9) $\frac{11}{5} =$

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

11) $\frac{29}{7} =$

12) $\frac{48}{11} =$

13) $\frac{35}{9} =$

14) $\frac{48}{11} =$

15) $\frac{29}{8} =$

16) $\frac{15}{6} =$

17) $\frac{36}{5} =$

18) $\frac{44}{12} =$

19) $\frac{85}{13} =$

20) $\frac{18}{3} =$

21) $\frac{43}{6} =$

MULTIPLY FRACTIONS

Multiply.

1) $\frac{1}{2} \times \frac{3}{5} =$

2) $\frac{2}{3} \times \frac{1}{5} =$

3) $\frac{7}{8} \times \frac{1}{3} =$

4) $\frac{2}{9} \times \frac{2}{3} =$

5) $1\frac{5}{9} \times 1\frac{2}{7} =$

6) $\frac{9}{13} \times \frac{1}{3} =$

7) $\frac{1}{2} \times \frac{1}{5} =$

8) $3\frac{3}{7} \times 1\frac{1}{4} =$

9) $\frac{2}{5} \times \frac{1}{8} =$

10) $\frac{1}{5} \times \frac{5}{2} =$

11) $1\frac{1}{2} \times \frac{2}{3} =$

12) $\frac{2}{9} \times \frac{3}{4} =$

13) $2\frac{3}{5} \times \frac{1}{6} =$

14) $2\frac{2}{3} \times 3\frac{1}{2} =$

15) $\frac{3}{7} \times \frac{6}{3} =$

16) $3\frac{2}{7} \times \frac{7}{8} =$

17) $1\frac{5}{12} \times 2\frac{6}{7} =$

18) $\frac{7}{12} \times \frac{6}{7} =$

19) $1\frac{4}{9} \times 2\frac{6}{7} =$

20) $4\frac{3}{5} \times 2\frac{1}{2} =$

21) $\frac{7}{8} \times \frac{10}{11} =$

DIVIDE FRACTIONS

Divide.

1) $\frac{1}{3} \div \frac{2}{3} =$

2) $\frac{4}{5} \div \frac{3}{4} =$

3) $\frac{3}{7} \div \frac{5}{6} =$

4) $\frac{9}{11} \div \frac{3}{22} =$

5) $\frac{5}{8} \div \frac{2}{5} =$

6) $\frac{1}{7} \div \frac{2}{7} =$

7) $\frac{8}{9} \div \frac{2}{3} =$

8) $\frac{1}{4} \div \frac{3}{4} =$

9) $\frac{3}{8} \div \frac{2}{3} =$

10) $\frac{3}{8} \div \frac{3}{2} =$

11) $1\frac{1}{2} \div \frac{4}{5} =$

12) $\frac{5}{9} \div 1\frac{1}{5} =$

13) $2\frac{1}{4} \div 1\frac{2}{3} =$

14) $1\frac{5}{6} \div \frac{1}{6} =$

15) $3\frac{1}{7} \div \frac{5}{9} =$

16) $3\frac{1}{8} \div \frac{5}{9} =$

17) $2\frac{3}{5} \div 1\frac{2}{3} =$

18) $3\frac{3}{11} \div 1\frac{5}{6} =$

19) $1\frac{4}{5} \div 1\frac{1}{8} =$

20) $3\frac{3}{5} \div 4\frac{1}{2} =$

21) $6\frac{2}{3} \div \frac{3}{8} =$

ADD FRACTIONS

Add.

1) $\frac{2}{5} + \frac{1}{5} =$

2) $\frac{3}{8} + \frac{1}{8} =$

3) $\frac{4}{7} + \frac{3}{7} =$

4) $\frac{1}{2} + \frac{2}{3} =$

5) $\frac{3}{5} + \frac{5}{6} =$

6) $\frac{2}{3} + \frac{5}{7} =$

7) $\frac{1}{10} + \frac{2}{5} =$

8) $\frac{1}{5} + \frac{4}{9} =$

9) $\frac{7}{8} + \frac{2}{3} =$

10) $\frac{5}{9} + \frac{1}{3} =$

11) $2\frac{1}{3} + \frac{1}{6} =$

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

13) $2\frac{1}{7} + \frac{1}{4} =$

14) $1\frac{2}{9} + 1\frac{2}{3} =$

15) $1\frac{3}{8} + 2\frac{1}{2} =$

16) $1\frac{9}{11} + 2\frac{3}{5} =$

17) $5\frac{2}{3} + 2\frac{1}{2} =$

18) $1\frac{1}{8} + 2\frac{1}{4} =$

19) $3\frac{6}{7} + 1\frac{3}{5} =$

20) $1\frac{5}{8} + 2\frac{1}{9} =$

21) $\frac{7}{9} + 1\frac{3}{7} =$

SUBTRACT FRACTIONS

Subtract.

1) $\frac{4}{5} - \frac{1}{5} =$

2) $\frac{7}{8} - \frac{3}{8} =$

3) $\frac{8}{9} - \frac{5}{9} =$

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

5) $\frac{7}{10} - \frac{1}{2} =$

6) $\frac{2}{5} - \frac{1}{3} =$

7) $\frac{2}{3} - \frac{3}{8} =$

8) $\frac{5}{6} - \frac{2}{7} =$

9) $\frac{2}{3} - \frac{4}{9} =$

10) $\frac{5}{6} - \frac{1}{2} =$

11) $1\frac{2}{5} - \frac{3}{4} =$

12) $2\frac{1}{6} - \frac{3}{5} =$

13) $2\frac{1}{4} - 1\frac{3}{5} =$

14) $2\frac{2}{3} - 1\frac{1}{4} =$

15) $1\frac{5}{8} - \frac{3}{5} =$

16) $1\frac{2}{5} - \frac{5}{6} =$

17) $2\frac{1}{4} - 1\frac{2}{7} =$

18) $1\frac{1}{8} - \frac{2}{5} =$

19) $1\frac{5}{6} - 1\frac{1}{2} =$

20) $1\frac{4}{9} - \frac{3}{5} =$

21) $2\frac{3}{5} - 1\frac{4}{5} =$

SUBTRACT FRACTIONS WITH WHOLE NUMBERS

Subtract.

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

2) $2 - 1\frac{1}{2} =$

3) $3\frac{3}{5} - 2 =$

4) $2\frac{6}{7} - 1 =$

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

6) $5\frac{7}{8} - 4 =$

7) $2\frac{1}{3} - 1 =$

8) $8 - 6\frac{8}{9} =$

9) $10 - 4\frac{3}{7} =$

10) $9 - 4\frac{2}{7} =$

11) $3\frac{5}{9} - 2 =$

12) $5\frac{7}{8} - 4 =$

13) $13 - 8\frac{1}{4} =$

14) $8 - 6\frac{1}{4} =$

15) $12 - 3\frac{4}{5} =$

16) $7\frac{4}{7} - 3 =$

17) $24 - 16\frac{6}{11} =$

18) $1 - \frac{3}{8} =$

19) $10\frac{3}{5} - 10 =$

20) $12\frac{1}{2} - 7 =$

21) $7 - 3\frac{7}{8} =$

WORKBOOK REVIEW

Compare each set of fractions and write $<$, $>$, or $=$ in the box.

1) $\frac{3}{7} \square \frac{4}{8}$

2) $\frac{1}{9} \square \frac{2}{18}$

3) $\frac{3}{5} \square \frac{4}{6}$

Change each mixed number into an improper fraction.

4) $2\frac{3}{5} =$

5) $4\frac{1}{7} =$

6) $3\frac{4}{9} =$

Change each improper fraction into a mixed number.

7) $\frac{21}{8} =$

8) $\frac{46}{9} =$

9) $\frac{17}{3} =$

Reduce the fractions.

10) $\frac{12}{36} =$

11) $\frac{27}{36} =$

12) $\frac{16}{24} =$

Multiply.

13) $\frac{2}{3} \times \frac{1}{5} =$

14) $\frac{3}{5} \times \frac{2}{3} =$

15) $1\frac{1}{2} \times \frac{5}{8} =$

Divide.

16) $\frac{7}{9} \div \frac{2}{3} =$

17) $\frac{6}{11} \div \frac{2}{3} =$

18) $2\frac{3}{4} \div \frac{2}{5} =$

Add.

19) $\frac{2}{5} + \frac{3}{4} =$

20) $1\frac{1}{8} + \frac{4}{7} =$

21) $3\frac{4}{7} + 2\frac{3}{5} =$

Subtract.

22) $\frac{3}{5} - \frac{7}{12} =$

23) $2\frac{3}{5} - \frac{7}{9} =$

24) $3\frac{1}{5} - 2\frac{1}{4} =$

Subtract – whole numbers and fractions.

25) $7 - 3\frac{2}{5} =$

26) $4\frac{7}{9} - 3 =$

27) $3 - 2\frac{2}{5} =$

REDUCE FRACTIONS

SOLUTIONS

Reduce fractions to lowest terms.

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

2) $\frac{6}{8} = \frac{3}{4}$

3) $\frac{5}{10} = \frac{1}{2}$

4) $\frac{8}{12} = \frac{2}{3}$

5) $\frac{9}{12} = \frac{3}{4}$

6) $\frac{15}{25} = \frac{3}{5}$

7) $\frac{21}{28} = \frac{3}{4}$

8) $\frac{18}{27} = \frac{2}{3}$

9) $\frac{20}{30} = \frac{2}{3}$

10) $\frac{18}{36} = \frac{1}{2}$

11) $\frac{18}{30} = \frac{3}{5}$

12) $\frac{48}{64} = \frac{3}{4}$

13) $\frac{54}{63} = \frac{6}{7}$

14) $\frac{22}{55} = \frac{2}{5}$

15) $\frac{5}{30} = \frac{1}{6}$

16) $\frac{45}{81} = \frac{5}{9}$

17) $\frac{20}{40} = \frac{1}{2}$

18) $\frac{11}{121} = \frac{1}{11}$

EQUIVALENT FRACTIONS

SOLUTIONS

Compare each set of fractions and write $<$, $>$, or $=$ in the box.

1) $\frac{2}{5} \boxed{=} \frac{4}{10}$

2) $\frac{7}{8} \boxed{=} \frac{21}{24}$

3) $\frac{3}{4} \boxed{=} \frac{12}{16}$

4) $\frac{5}{9} \boxed{=} \frac{10}{18}$

5) $\frac{1}{12} \boxed{<} \frac{2}{7}$

6) $\frac{1}{3} \boxed{<} \frac{3}{4}$

7) $\frac{1}{3} \boxed{<} \frac{3}{5}$

8) $\frac{10}{16} \boxed{=} \frac{5}{8}$

9) $\frac{7}{10} \boxed{>} \frac{1}{8}$

10) $1\frac{1}{2} \boxed{=} \frac{6}{4}$

11) $\frac{13}{5} \boxed{=} 2\frac{3}{5}$

12) $3\frac{3}{7} \boxed{<} \frac{4}{1}$

13) $4\frac{5}{9} \boxed{>} \frac{12}{9}$

14) $5\frac{2}{3} \boxed{>} 3\frac{2}{5}$

15) $\frac{1}{6} \boxed{<} \frac{3}{8}$

16) $1\frac{1}{9} \boxed{<} \frac{19}{8}$

17) $4\frac{3}{4} \boxed{=} \frac{19}{4}$

18) $\frac{3}{9} \boxed{=} \frac{21}{63}$

MIXED NUMBERS

SOLUTIONS

Convert each mixed number into an improper fraction.

1) $1\frac{3}{4} = \frac{7}{4}$

2) $6\frac{2}{5} = \frac{32}{5}$

3) $2\frac{1}{6} = \frac{13}{6}$

4) $1\frac{7}{9} = \frac{16}{9}$

5) $3\frac{3}{11} = \frac{36}{11}$

6) $2\frac{4}{9} = \frac{22}{9}$

7) $4\frac{1}{7} = \frac{29}{7}$

8) $7\frac{1}{6} = \frac{43}{6}$

9) $5\frac{3}{13} = \frac{68}{13}$

10) $3\frac{1}{8} = \frac{25}{8}$

11) $9\frac{8}{10} = \frac{49}{5}$

12) $2\frac{2}{3} = \frac{8}{3}$

13) $4\frac{3}{8} = \frac{35}{8}$

14) $3\frac{5}{6} = \frac{23}{6}$

15) $4\frac{5}{12} = \frac{53}{12}$

16) $5\frac{4}{5} = \frac{29}{5}$

17) $10\frac{5}{6} = \frac{65}{6}$

18) $6\frac{3}{10} = \frac{63}{10}$

19) $7\frac{8}{9} = \frac{71}{9}$

20) $4\frac{1}{9} = \frac{37}{9}$

21) $3\frac{2}{3} = \frac{11}{3}$

IMPROPER FRACTIONS SOLUTIONS

Convert each improper fraction into a mixed number.

1) $\frac{7}{3} = 2\frac{1}{3}$

2) $\frac{9}{5} = 1\frac{4}{5}$

3) $\frac{8}{5} = 1\frac{3}{5}$

4) $\frac{17}{3} = 5\frac{2}{3}$

5) $\frac{25}{7} = 3\frac{4}{7}$

6) $\frac{23}{8} = 2\frac{7}{8}$

7) $\frac{17}{9} = 1\frac{8}{9}$

8) $\frac{31}{9} = 3\frac{4}{9}$

9) $\frac{11}{5} = 2\frac{1}{5}$

10) $\frac{3}{2} = 1\frac{1}{2}$

11) $\frac{29}{7} = 4\frac{1}{7}$

12) $\frac{48}{11} = 4\frac{4}{11}$

13) $\frac{35}{9} = 3\frac{8}{9}$

14) $\frac{48}{11} = 4\frac{4}{11}$

15) $\frac{29}{8} = 3\frac{5}{8}$

16) $\frac{15}{6} = 2\frac{1}{2}$

17) $\frac{36}{5} = 7\frac{1}{5}$

18) $\frac{44}{12} = 3\frac{2}{3}$

19) $\frac{85}{13} = 6\frac{7}{13}$

20) $\frac{18}{3} = 6$

21) $\frac{43}{6} = 7\frac{1}{6}$

MULTIPLY FRACTIONS

SOLUTIONS

Multiply.

1) $\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$

2) $\frac{2}{3} \times \frac{1}{5} = \frac{2}{15}$

3) $\frac{7}{8} \times \frac{1}{3} = \frac{7}{24}$

4) $\frac{2}{9} \times \frac{2}{3} = \frac{4}{27}$

5) $1\frac{5}{9} \times 1\frac{2}{7} = 2$

6) $\frac{9}{13} \times \frac{1}{3} = \frac{3}{13}$

7) $\frac{1}{2} \times \frac{1}{5} = \frac{1}{10}$

8) $3\frac{3}{7} \times 1\frac{1}{4} = 4\frac{2}{7}$

9) $\frac{2}{5} \times \frac{1}{8} = \frac{1}{20}$

10) $\frac{1}{5} \times \frac{5}{2} = \frac{1}{2}$

11) $1\frac{1}{2} \times \frac{2}{3} = 1$

12) $\frac{2}{9} \times \frac{3}{4} = \frac{1}{6}$

13) $2\frac{3}{5} \times \frac{1}{6} = \frac{13}{30}$

14) $2\frac{2}{3} \times 3\frac{1}{2} = 9\frac{1}{3}$

15) $\frac{3}{7} \times \frac{6}{3} = \frac{6}{7}$

16) $3\frac{2}{7} \times \frac{7}{8} = 2\frac{7}{8}$

17) $1\frac{5}{12} \times 2\frac{6}{7} = 4\frac{1}{21}$

18) $\frac{7}{12} \times \frac{6}{7} = \frac{1}{2}$

19) $1\frac{5}{12} \times 2\frac{6}{7} = \frac{9}{2} = 4\frac{1}{2}$

20) $4\frac{3}{5} \times 2\frac{1}{2} = 11\frac{1}{2}$

21) $\frac{7}{8} \times \frac{10}{11} = \frac{35}{44}$

DIVIDE FRACTIONS

SOLUTIONS

Divide.

$$1) \frac{1}{3} \div \frac{2}{3} = \frac{1}{3} \times \frac{3}{2} = \frac{1}{2}$$

$$2) \frac{4}{5} \div \frac{3}{4} = \frac{4}{5} \times \frac{4}{3} = 1\frac{1}{15}$$

$$3) \frac{3}{7} \div \frac{5}{6} = \frac{3}{7} \times \frac{6}{5} = \frac{18}{35}$$

$$4) \frac{9}{11} \div \frac{3}{22} = \frac{9}{11} \times \frac{22}{3} = 6$$

$$5) \frac{5}{8} \div \frac{2}{5} = \frac{5}{8} \times \frac{5}{2} = 1\frac{9}{16}$$

$$6) \frac{1}{7} \div \frac{2}{7} = \frac{1}{7} \times \frac{7}{2} = \frac{1}{2}$$

$$7) \frac{8}{9} \div \frac{2}{3} = \frac{8}{9} \times \frac{3}{2} = 1\frac{1}{3}$$

$$8) \frac{1}{4} \div \frac{3}{4} = \frac{1}{4} \times \frac{4}{3} = \frac{1}{3}$$

$$9) \frac{3}{8} \div \frac{2}{3} = \frac{3}{8} \times \frac{3}{2} = \frac{9}{16}$$

$$10) \frac{3}{8} \div \frac{3}{2} = \frac{3}{8} \times \frac{2}{3} = \frac{1}{4}$$

$$11) 1\frac{1}{2} \div \frac{4}{5} = \frac{3}{2} \times \frac{5}{4} = 1\frac{7}{8}$$

$$12) \frac{5}{9} \div 1\frac{1}{5} = \frac{5}{9} \times \frac{6}{5} = \frac{22}{54}$$

$$13) 2\frac{1}{4} \div 1\frac{2}{3} = \frac{9}{2} \times \frac{3}{5} = 1\frac{7}{20}$$

$$14) 1\frac{5}{6} \div \frac{1}{6} = \frac{11}{6} \times \frac{6}{1} = 11$$

$$15) 3\frac{1}{7} \div \frac{5}{9} = \frac{22}{7} \times \frac{9}{5} = 5\frac{23}{35}$$

$$16) 3\frac{1}{8} \div \frac{5}{9} = \frac{25}{8} \times \frac{9}{5} = 5\frac{5}{8}$$

$$17) 2\frac{3}{5} \div 1\frac{2}{3} = \frac{13}{5} \times \frac{3}{5} = 1\frac{14}{25}$$

$$18) 3\frac{3}{11} \div 1\frac{5}{6} = \frac{36}{11} \times \frac{6}{11} = 1\frac{95}{121}$$

$$19) 1\frac{4}{5} \div 1\frac{1}{8} = \frac{9}{5} \times \frac{8}{9} = 1\frac{3}{5}$$

$$20) 3\frac{3}{5} \div 4\frac{1}{2} = \frac{18}{5} \times \frac{2}{9} = \frac{4}{5}$$

$$21) 6\frac{2}{3} \div \frac{3}{8} = \frac{20}{3} \times \frac{8}{3} = 17\frac{7}{9}$$

ADD FRACTIONS

SOLUTIONS

Add.

$$1) \frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

$$2) \frac{3}{8} + \frac{1}{8} = \frac{4}{8} = \frac{1}{2}$$

$$3) \frac{4}{7} + \frac{3}{7} = \frac{7}{7} = 1$$

$$4) \frac{1}{2} + \frac{2}{3} = \frac{7}{6} = 1\frac{1}{6}$$

$$5) \frac{3}{5} + \frac{5}{6} = \frac{43}{30} = 1\frac{13}{30}$$

$$6) \frac{2}{3} + \frac{5}{7} = \frac{29}{21} = 1\frac{8}{21}$$

$$7) \frac{1}{10} + \frac{2}{5} = \frac{1}{2}$$

$$8) \frac{1}{5} + \frac{4}{9} = \frac{29}{45}$$

$$9) \frac{7}{8} + \frac{2}{3} = \frac{37}{24} = 1\frac{13}{24}$$

$$10) \frac{5}{9} + \frac{1}{3} = \frac{8}{9}$$

$$11) 2\frac{1}{3} + \frac{1}{6} = \frac{39}{18} = \frac{5}{2} = 2\frac{1}{2}$$

$$12) 1\frac{5}{7} + 1\frac{2}{3} = \frac{71}{21} = 3\frac{8}{21}$$

$$13) 2\frac{1}{7} + \frac{1}{4} = \frac{67}{28} = 2\frac{11}{28}$$

$$14) 1\frac{2}{9} + 1\frac{2}{3} = \frac{26}{9} = 2\frac{8}{9}$$

15) $1\frac{3}{8} + 2\frac{1}{2} = \frac{31}{8} = 3\frac{7}{8}$

16) $1\frac{9}{11} + 2\frac{3}{5} = \frac{243}{55} = 4\frac{23}{55}$

17) $5\frac{2}{3} + 2\frac{1}{2} = \frac{49}{6} = 8\frac{1}{6}$

18) $1\frac{1}{8} + 2\frac{1}{4} = \frac{27}{8} = 3\frac{3}{8}$

19) $3\frac{6}{7} + 1\frac{3}{5} = \frac{191}{35} = 5\frac{16}{35}$

20) $1\frac{5}{8} + 2\frac{1}{9} = \frac{269}{72} = 3\frac{53}{72}$

21) $\frac{7}{9} + 1\frac{3}{7} = \frac{139}{63} = 2\frac{13}{63}$

SUBTRACT FRACTIONS

SOLUTIONS

Subtract.

$$1) \frac{4}{5} - \frac{1}{5} = \frac{3}{5}$$

$$2) \frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$$

$$3) \frac{8}{9} - \frac{5}{9} = \frac{3}{9} = \frac{1}{3}$$

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

$$5) \frac{7}{10} - \frac{1}{2} = \frac{2}{10} = \frac{1}{5}$$

$$6) \frac{2}{5} - \frac{1}{3} = \frac{1}{15}$$

$$7) \frac{2}{3} - \frac{3}{8} = \frac{7}{24}$$

$$8) \frac{5}{6} - \frac{2}{7} = \frac{23}{42}$$

$$9) \frac{2}{3} - \frac{4}{9} = \frac{2}{9}$$

$$10) \frac{5}{6} - \frac{1}{2} = \frac{1}{3}$$

$$11) 1\frac{2}{5} - \frac{3}{4} = \frac{13}{20}$$

$$12) 2\frac{1}{6} - \frac{3}{5} = \frac{47}{30} = 1\frac{17}{30}$$

$$13) 2\frac{1}{4} - 1\frac{3}{5} = \frac{13}{20}$$

$$14) 2\frac{2}{3} - 1\frac{1}{4} = \frac{17}{12} = 1\frac{5}{12}$$

$$15) 1\frac{5}{8} - \frac{3}{5} = \frac{41}{40} = 1\frac{1}{40}$$

$$16) 1\frac{2}{5} - \frac{5}{6} = \frac{17}{30}$$

$$17) 2\frac{1}{4} - 1\frac{2}{7} = \frac{27}{28}$$

18) $1\frac{1}{8} - \frac{2}{5} = \frac{29}{40}$

19) $1\frac{5}{6} - 1\frac{1}{2} = \frac{1}{3}$

20) $1\frac{4}{9} - \frac{3}{5} = \frac{38}{45}$

21) $2\frac{3}{5} - 1\frac{4}{5} = \frac{4}{5}$

SUBTRACT FRACTIONS WITH WHOLE NUMBERS - SOLUTIONS

Subtract.

$$1) 4 - \frac{2}{3} = \frac{10}{3} = 3\frac{1}{3}$$

$$2) 2 - 1\frac{1}{2} = \frac{1}{2}$$

$$3) 3\frac{3}{5} - 2 = \frac{8}{5} = 1\frac{3}{5}$$

$$4) 2\frac{6}{7} - 1 = \frac{13}{7} = 1\frac{6}{7}$$

$$5) 7 - 4\frac{1}{9} = \frac{26}{9} = 2\frac{8}{9}$$

$$6) 5\frac{7}{8} - 4 = \frac{15}{8} = 1\frac{7}{8}$$

$$7) 2\frac{1}{3} - 1 = \frac{4}{3} = 1\frac{1}{3}$$

$$8) 8 - 6\frac{8}{9} = \frac{10}{9} = 1\frac{1}{9}$$

$$9) 10 - 4\frac{3}{7} = \frac{39}{7} = 5\frac{4}{7}$$

$$10) 9 - 4\frac{2}{7} = \frac{33}{7} = 4\frac{5}{7}$$

$$11) 3\frac{5}{9} - 2 = \frac{14}{9} = 1\frac{5}{9}$$

$$12) 5\frac{7}{8} - 4 = \frac{15}{8} = 1\frac{7}{8}$$

$$13) 13 - 8\frac{1}{4} = \frac{19}{4} = 4\frac{3}{4}$$

$$14) 8 - 6\frac{1}{4} = \frac{7}{4} = 1\frac{3}{4}$$

15) $12 - 3\frac{4}{5} = \frac{41}{5} = 8\frac{1}{5}$

16) $7\frac{4}{7} - 3 = \frac{32}{7} = 4\frac{4}{7}$

17) $24 - 16\frac{6}{11} = \frac{82}{11} = 7\frac{5}{11}$

18) $1 - \frac{3}{8} = \frac{5}{8}$

19) $10\frac{3}{5} - 10 = \frac{3}{5}$

20) $12\frac{1}{2} - 7 = \frac{11}{2} = 5\frac{1}{2}$

21) $7 - 3\frac{7}{8} = \frac{25}{8} = 3\frac{1}{8}$

WORKBOOK REVIEW

SOLUTIONS

Compare each set of fractions and write $<$, $>$, or $=$ in the box.

$$1) \frac{3}{7} \boxed{<} \frac{4}{8}$$

$$2) \frac{1}{9} \boxed{=} \frac{2}{18}$$

$$3) \frac{3}{5} \boxed{<} \frac{4}{6}$$

Change each mixed number into an improper fraction.

$$4) 2\frac{3}{5} = \frac{13}{5}$$

$$5) 4\frac{1}{7} = \frac{29}{7}$$

$$6) 3\frac{4}{9} = \frac{31}{9}$$

Change each improper fraction into a mixed number.

$$7) \frac{21}{8} = 2\frac{5}{8}$$

$$8) \frac{46}{9} = 5\frac{1}{9}$$

$$9) \frac{17}{3} = 5\frac{2}{3}$$

Reduce the fractions.

$$10) \frac{12}{36} = \frac{1}{3}$$

$$11) \frac{27}{36} = \frac{3}{4}$$

$$12) \frac{16}{24} = \frac{2}{3}$$

Multiply.

$$13) \frac{2}{3} \times \frac{1}{5} = \frac{2}{15}$$

$$14) \frac{3}{5} \times \frac{2}{3} = \frac{2}{5}$$

$$15) 1\frac{1}{2} \times \frac{5}{8} = \frac{15}{8}$$

Divide.

$$16) \frac{7}{9} \div \frac{2}{3} = \frac{7}{6} = 1\frac{1}{6}$$

$$17) \frac{6}{11} \div \frac{2}{3} = \frac{9}{11}$$

$$18) 2\frac{3}{4} \div \frac{2}{5} = \frac{55}{8} = 6\frac{7}{8}$$

Add.

$$19) \frac{2}{5} + \frac{3}{4} = \frac{23}{20} = 1\frac{3}{20}$$

$$20) 1\frac{1}{8} + \frac{4}{7} = \frac{95}{56} = 1\frac{39}{56}$$

$$21) 3\frac{4}{7} + 2\frac{3}{5} = \frac{216}{35} = 6\frac{6}{35}$$

Subtract.

$$22) \frac{3}{5} - \frac{7}{12} = \frac{1}{60}$$

$$23) 2\frac{3}{5} - \frac{7}{9} = \frac{82}{45} = 1\frac{37}{45}$$

$$24) 3\frac{1}{5} - 2\frac{1}{4} = \frac{19}{20}$$

Subtract – whole numbers and fractions.

$$25) 7 - 3\frac{2}{5} = \frac{18}{5} = 3\frac{3}{5}$$

$$26) 4\frac{7}{9} - 3 = \frac{16}{9} = 1\frac{7}{9}$$

$$27) 3 - 2\frac{2}{5} = \frac{3}{5}$$