

18E

- 1) $3\frac{6}{5} = 4\frac{1}{5}$
- 2) $10\frac{8}{9}$
- 3) $7\frac{9}{6} = 8\frac{3}{6} = 8\frac{1}{2}$
- 4) $\frac{15}{18} - \frac{6}{18} = \frac{9}{18} = \frac{1}{2}$
- 5) $\frac{16}{24} - \frac{3}{24} = \frac{13}{24}$
- 6) $\frac{15}{20} + \frac{16}{20} = \frac{31}{20} = 1\frac{11}{20}$
- 7) $\frac{5}{7} \times \frac{1}{2} = \frac{5}{14}$
- 8) $\frac{12}{20} \div \frac{15}{20} = \frac{12 \div 15}{1} = \frac{4}{5}$
- 9) $\frac{1}{4} \times \frac{5}{6} = \frac{5}{24}$
- 10) $3\frac{10}{16} = 3\frac{5}{8}$
- 11) $12 \times 14 \times 5 = 840$ cu. in.
- 12) $21 \times 9 \times 8 = 1,512$ cu. in.
- 13) $7 \times 6 \times 10 = 420$ cu. ft.
- 14) $20 \times 15 \times 6 = 1,800$ cu. ft.
- 15) $1,800 \times 56 = 100,800$ lbs.
- 16) 16: 2, 4, 8, 16
20: 2, 4, 5, 10, 20
GCF = 4
- 17) $32 + 32 = 64$ ft.
- 18) $5\frac{2}{3} + \frac{1}{3} = 5\frac{3}{3} = 6$ ft.

18F

- 1) $14\frac{6}{8} = 15$
- 2) $14\frac{12}{8} = 15\frac{4}{8} = 15\frac{1}{2}$
- 3) $15\frac{16}{10} = 16\frac{6}{10} = 16\frac{3}{5}$
- 4) $\frac{45}{63} - \frac{14}{63} = \frac{31}{63}$
- 5) $\frac{5}{40} + \frac{32}{40} = \frac{37}{40}$
- 6) $\frac{48}{56} - \frac{7}{56} = \frac{41}{56}$
- 7) $\frac{40}{48} \div \frac{42}{48} = \frac{40 \div 42}{1} = \frac{40}{42} = \frac{20}{21}$
- 8) $\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$
- 9) $\frac{12}{18} \div \frac{3}{18} = \frac{12 \div 3}{1} = 4$
- 10) $56 \div 7 = 8$; $8 \times 4 = 32$
- 11) $50 \div 5 = 10$; $10 \times 3 = 30$
- 12) $14 \div 2 = 7$; $7 \times 1 = 7$
- 13) $10 \times 15 \times 7 = 1,050$ cu. in.
- 14) $33 \times 19 \times 12 = 7,524$ cu. in.
- 15) $5 \times 4 \times 8 = 160$ cu. ft.
- 16) $25 \times 13 \times 8 = 2,600$ cu. ft. full
 $2,600 \div 2 = 1,300$ cu. ft. half full
- 17) $1,300 \times 56 = 72,800$ lbs.
- 18) yes
- 19) $\frac{1}{2} + \frac{1}{2} = \frac{2}{2} = 1$
 $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$
 $1 + \frac{1}{2} = 1\frac{1}{2}$ mi.
- 20) $\frac{4}{5} \div \frac{4}{1} = \frac{4}{5} \div \frac{20}{5} = \frac{4 \div 20}{1} = \frac{4}{20} = \frac{1}{5}$

19A

- 1) done
- 2) done
- 3) $5\frac{6}{5} - 2\frac{3}{5} = 3\frac{3}{5}$
- 4) $3\frac{9}{8} - 1\frac{5}{8} = 2\frac{4}{8} = 2\frac{1}{2}$
- 5) $1\frac{5}{4} - 1\frac{2}{4} = \frac{3}{4}$
- 6) $5\frac{8}{8} - 3\frac{7}{8} = 2\frac{1}{8}$
- 7) $6\frac{21}{16} - 2\frac{7}{16} = 4\frac{14}{16} = 4\frac{7}{8}$
- 8) $8\frac{3}{5} - 2\frac{3}{5} = 6$
- 9) $3\frac{7}{6} - 1\frac{5}{6} = 2\frac{2}{6} = 2\frac{1}{3}$
- 10) $8\frac{9}{8} - 2\frac{7}{8} = 6\frac{2}{8} = 6\frac{1}{4}$
- 11) $3\frac{3}{3} - \frac{1}{3} = 3\frac{2}{3}$
- 12) $6\frac{7}{5} - 6\frac{4}{5} = \frac{3}{5}$

19B

- 1) $13\frac{10}{7} - 2\frac{4}{7} = 11\frac{6}{7}$
- 2) $10\frac{9}{9} - 2\frac{8}{9} = 8\frac{1}{9}$
- 3) $7\frac{13}{10} - 5\frac{4}{10} = 2\frac{9}{10}$
- 4) $18\frac{8}{6} - 10\frac{3}{6} = 8\frac{5}{6}$
- 5) $2\frac{4}{3} - 1\frac{2}{3} = 1\frac{2}{3}$
- 6) $4\frac{7}{7} - 1\frac{4}{7} = 3\frac{3}{7}$
- 7) $4\frac{5}{4} - 2\frac{3}{4} = 2\frac{2}{4} = 2\frac{1}{2}$
- 8) $5\frac{6}{5} - 2\frac{3}{5} = 3\frac{3}{5}$
- 9) $3\frac{9}{8} - 1\frac{5}{8} = 2\frac{4}{8} = 2\frac{1}{2}$
- 10) $5\frac{13}{8} - 3\frac{7}{8} = 2\frac{6}{8} = 2\frac{3}{4}$
- 11) $7\frac{10}{10} - \frac{3}{10} = 7\frac{7}{10}$
- 12) $1\frac{5}{4} - 1\frac{3}{4} = \frac{2}{4} = \frac{1}{2}$

19C

- 1) $4\frac{4}{3} - 2\frac{2}{3} = 2\frac{2}{3}$
- 2) $5\frac{8}{8} - 2\frac{3}{8} = 3\frac{5}{8}$
- 3) $5\frac{19}{16} - 2\frac{5}{16} = 3\frac{14}{16} = 3\frac{7}{8}$
- 4) $7\frac{6}{5} - 2\frac{4}{5} = 5\frac{2}{5}$
- 5) $8\frac{5}{4} - 6\frac{3}{4} = 2\frac{2}{4} = 2\frac{1}{2}$
- 6) $8\frac{5}{5} - 1\frac{3}{5} = 7\frac{2}{5}$
- 7) $4\frac{1}{6} - 1\frac{1}{6} = 3$
- 8) $4\frac{13}{8} - 2\frac{7}{8} = 2\frac{6}{8} = 2\frac{3}{4}$
- 9) $5\frac{4}{3} - 2\frac{2}{3} = 3\frac{2}{3}$
- 10) $17\frac{5}{4} - 7\frac{2}{4} = 10\frac{3}{4}$
- 11) $5\frac{5}{5} - \frac{4}{5} = 5\frac{1}{5}$
- 12) $8\frac{7}{6} - 2\frac{5}{6} = 6\frac{2}{6} = 6\frac{1}{3}$

19D

- 1) $4\frac{6}{5} - 2\frac{3}{5} = 2\frac{3}{5}$
- 2) $7\frac{13}{8} - 2\frac{7}{8} = 5\frac{6}{8} = 5\frac{3}{4}$
- 3) $5\frac{3}{3} - 4\frac{2}{3} = 1\frac{1}{3}$
- 4) $9\frac{5}{5} = 10$
- 5) $3\frac{6}{4} = 4\frac{2}{4} = 4\frac{1}{2}$
- 6) $12\frac{18}{12} = 13\frac{6}{12} = 13\frac{1}{2}$
- 7) $\frac{1}{6} \times \frac{4}{5} = \frac{4}{30} = \frac{2}{15}$
- 8) $\frac{3}{6} \times \frac{1}{2} = \frac{3}{12} = \frac{1}{4}$
- 9) $\frac{4}{5} \times \frac{2}{7} = \frac{8}{35}$
- 10) done
- 11) done
- 12) $6 \div 3 = 2$ yds.
- 13) $5 \times 3 = 15$ ft.
- 14) $3 \times 3 = 9$ ft.
 $9 \times 15 = 135$ sq. ft.
- 15) $15 \div 3 = 5$ yds.
 $5 \times 3 = 15$ sq. yds.
- 16) $\frac{3}{8} + \frac{1}{8} = \frac{4}{8}$
 $\frac{4}{8} + \frac{3}{4} = \frac{16}{32} + \frac{24}{32} =$
 $\frac{40}{32} = 1\frac{8}{32} = 1\frac{1}{4}$ ft.
- 17) $4\frac{5}{4} - 3\frac{3}{4} = 1\frac{2}{4} = 1\frac{1}{2}$ ft.
- 18) $3 \div 3 = 1$ yd.
 $1 \times 1 \times 1 = 1$ cu. yd.

19E

- 1) $6\frac{9}{6} - 2\frac{5}{6} = 4\frac{4}{6} = 4\frac{2}{3}$
- 2) $5\frac{11}{7} - \frac{6}{7} = 5\frac{5}{7}$
- 3) $4\frac{8}{8} - 4\frac{6}{8} = \frac{2}{8} = \frac{1}{4}$
- 4) $5\frac{2}{2} = 6$
- 5) $16\frac{8}{7} = 17\frac{1}{7}$
- 6) $7\frac{9}{7} = 8\frac{2}{7}$
- 7) $\frac{7}{8} + \frac{1}{8} = \frac{7+1}{8} = 1$
- 8) $\frac{15}{27} + \frac{18}{27} = \frac{15+18}{27} = \frac{33}{27} = \frac{11}{9}$
- 9) $\frac{4}{12} + \frac{9}{12} = \frac{4+9}{12} = \frac{13}{12}$
- 10) $1\frac{2}{10} = 1\frac{1}{5}$
- 11) $24 \div 3 = 8$ yds.
- 12) $10 \times 3 = 30$ ft.
- 13) $36 \div 3 = 12$ yds.
- 14) $16 \times 3 = 48$ ft.
- 15) $\frac{1}{2} \times \frac{2}{5} = \frac{2}{10} = \frac{1}{5}$
 $\frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$ sq. mi.
- 16) $(1/2)(20)(4) = 40$ cu. ft.
- 17) $3\frac{1}{8} + 4\frac{5}{8} = 7\frac{6}{8}$
 $7\frac{6}{8} - 2\frac{7}{8} =$
 $6\frac{14}{8} - 2\frac{7}{8} = 4\frac{7}{8}$ lbs.
- 18) $125 \div 25 = 5$ ft.

19F

- 1) $25\frac{1}{3} - 12\frac{1}{3} = 13$
- 2) $\frac{13}{8} - \frac{6}{8} = \frac{7}{8}$
- 3) $8\frac{7}{7} - 4\frac{2}{7} = 4\frac{5}{7}$
- 4) $3\frac{4}{4} = 4$
- 5) $17\frac{7}{6} = 18\frac{1}{6}$
- 6) $14\frac{13}{9} = 15\frac{4}{9}$
- 7) $\frac{7}{14} + \frac{6}{14} = \frac{13}{14}$
 $\frac{13}{14} + \frac{4}{9} = \frac{117}{126} + \frac{56}{126} = \frac{173}{126} = 1\frac{47}{126}$
- 8) $\frac{3}{6} + \frac{4}{6} = \frac{7}{6}$; $\frac{7}{6} + \frac{3}{5} = \frac{35}{30} + \frac{18}{30} = \frac{53}{30} = 1\frac{23}{30}$
- 9) $\frac{8}{12} + \frac{3}{12} + \frac{1}{12} = \frac{12}{12} = 1$
- 10) $\frac{15}{20} < \frac{16}{20}$
- 11) $\frac{32}{72} > \frac{27}{72}$
- 12) $\frac{72}{132} > \frac{55}{132}$
- 13) $45 \div 3 = 15$ yds.
- 14) $17 \times 3 = 51$ ft.
- 15) $3 \times 3 = 9$ ft.
- 16) $\frac{5}{8} \times \frac{1}{5} = \frac{5}{40} = \frac{1}{8}$ sq. mi.
- 17) $\frac{5}{8} + \frac{5}{8} = \frac{10}{8} = \frac{5}{4}$; $\frac{1}{5} + \frac{1}{5} = \frac{2}{5}$
 $\frac{5}{4} + \frac{2}{5} = \frac{25}{20} + \frac{8}{20} = \frac{33}{20} = 1\frac{13}{20}$ mi.
- 18) $2\frac{3}{5} - 1\frac{4}{5} = 1\frac{8}{5} - 1\frac{4}{5} = \frac{4}{5}$ bu.
- 19) $30 \times 3 = 90$ ft.
- 20) $1,260 \div 45 = 28$ ft.