

10E

- 1)  $\frac{2}{3} + \frac{1}{3} = \frac{2+1}{1} = 2$
- 2)  $\frac{15}{20} \div \frac{8}{20} = \frac{15 \div 8}{1} = \frac{15}{8}$  or  $1\frac{7}{8}$
- 3)  $\frac{8}{12} \div \frac{6}{12} = \frac{8 \div 6}{1} = \frac{8}{6}$  or  $1\frac{2}{6}$
- 4)  $\frac{4}{5} \times \frac{2}{5} = \frac{8}{25}$
- 5)  $\frac{6}{8} \times \frac{1}{2} = \frac{6}{16}$
- 6)  $\frac{1}{3} \times \frac{2}{5} = \frac{2}{15}$
- 7)  $\frac{9}{12} - \frac{8}{12} = \frac{1}{12}$
- 8)  $\frac{8}{80} + \frac{70}{80} = \frac{78}{80}$
- 9)  $\frac{9}{18} + \frac{4}{18} = \frac{13}{18}$   
 $\frac{13}{18} + \frac{3}{4} = \frac{52}{72} + \frac{54}{72} = \frac{106}{72}$  or  $1\frac{34}{72}$
- 10) 2,044
- 11) 59,688
- 12) 8,692
- 13) done
- 14)  $(700) \div (70) = (10)$
- 15)  $(900) \div (20) \approx (40 \text{ or } 45)$
- 16)  $50 \div 2 = 25$ ;  $25 \times 1 = \$25$
- 17)  $\frac{6}{42} + \frac{7}{42} = \frac{13}{42}$
- 18)  $\frac{6}{15} - \frac{5}{15} = \frac{1}{15}$
- 19)  $\frac{24}{32} \div \frac{4}{32} = \frac{24 \div 4}{1} = 6$
- 20)  $\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$  cup

10F

- 1)  $\frac{5}{8} + \frac{6}{8} = \frac{5+6}{1} = \frac{5}{6}$
- 2)  $\frac{8}{12} \div \frac{3}{12} = \frac{8 \div 3}{1} = \frac{8}{3}$  or  $2\frac{2}{3}$
- 3)  $\frac{12}{24} \div \frac{4}{24} = \frac{12 \div 4}{1} = 3$
- 4)  $\frac{4}{5} \times \frac{1}{10} = \frac{4}{50}$
- 5)  $\frac{5}{6} \times \frac{1}{12} = \frac{5}{72}$
- 6)  $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$
- 7)  $\frac{5}{20} + \frac{8}{20} = \frac{13}{20}$
- 8)  $\frac{40}{50} - \frac{35}{50} = \frac{5}{50}$
- 9)  $\frac{12}{22} + \frac{11}{22} = \frac{23}{22}$   
 $\frac{23}{22} + \frac{2}{3} = \frac{69}{66} + \frac{44}{66} = \frac{113}{66}$  or  $1\frac{47}{66}$
- 10) 560
- 11) 12,376
- 12) 15,990
- 13)  $(600) \div (40) \approx (15)$
- 14)  $(400) \div (80) = (5)$
- 15)  $(400) \div (10) = (40)$
- 16)  $\frac{1}{5} \times \frac{2}{3} = \frac{2}{15}$
- 17)  $\frac{1}{4} \div \frac{1}{16} = \frac{16}{64} \div \frac{4}{64} = \frac{16 \div 4}{1} = 4$
- 18)  $\frac{3}{7} + \frac{1}{4} = \frac{12}{28} + \frac{7}{28} = \frac{19}{28}$
- 19)  $256 \times 35 = 8,960$
- 20)  $\frac{5}{5} - \frac{1}{5} = \frac{4}{5}$ ;  $\frac{5}{6} \times \frac{4}{5} = \frac{20}{30}$

11A

- 1) done
- 2)  $1 \times 10$   
 $2 \times 5$   
 1, 2, 5, 10
- 3)  $1 \times 18$   
 $2 \times 9$   
 $3 \times 6$   
 1, 2, 3, 6, 9, 18
- 4) yes
- 5) no
- 6) no
- 7) no
- 8) yes
- 9) yes
- 10) yes
- 11) yes
- 12) no
- 13) yes
- 14) no
- 15) yes
- 16) yes
- 17) yes
- 18) no
- 19) done
- 20)  $1, 3, 5, 15$   
 $1, 2, 5, 10$   
 GCF = 5
- 21)  $1, 2, 3, 6$   
 $1, 2, 3, 6, 9, 18$   
 GCF = 6

11B

- 1)  $1 \times 9$   
 $3 \times 3$   
 1, 3, 9
- 2)  $1 \times 4$   
 $2 \times 2$   
 1, 2, 4
- 3)  $1 \times 14$   
 $2 \times 7$   
 1, 2, 7, 14
- 4) yes
- 5) yes
- 6) no
- 7) yes
- 8) no
- 9) no
- 10) done
- 11)  $1 \times 28$   
 $2 \times 14$   
 $4 \times 7$   
 1, 2, 4, 7, 14, 28
- 12)  $1, 3, 9$   
 $1, 3, 5, 15$   
 GCF = 3
- 13)  $1, 2, 5, 10$   
 $1, 5, 25$   
 GCF = 5
- 14)  $1, 2, 3, 6$   
 $1, 2, 3, 4, 6, 12$   
 GCF = 6

11C

- 1)  $1 \times 8$   
 $2 \times 4$   
 1, 2, 4, 8
- 2)  $1 \times 20$   
 $2 \times 10$   
 $4 \times 5$   
 1, 2, 4, 5, 10, 20
- 3)  $1 \times 22$   
 $2 \times 11$   
 1, 2, 11, 22
- 4) no
- 5) no
- 6) yes
- 7) yes
- 8) no
- 9) no
- 10)  $1 \times 42$   
 $2 \times 21$   
 $3 \times 14$   
 $6 \times 7$   
 1, 2, 3, 6, 7, 14, 21, 42
- 11)  $1 \times 34$   
 $2 \times 17$   
 1, 2, 17, 34
- 12)  $1 \times 50$   
 $2 \times 25$   
 $5 \times 10$   
 1, 2, 5, 10, 25, 50
- 13)  $1, 2, 4, 8$   
 $1, 2, 3, 4, 6, 8, 12, 16, 24, 48$   
 GCF = 8
- 14)  $1, 3, 5, 15$   
 $1, 5, 7, 35$   
 GCF = 5
- 15)  $1, 3, 9$   
 $1, 2, 3, 6, 9, 18$   
 GCF = 9

11D

- 1) yes
- 2) yes
- 3) no
- 4)  $\underline{1}, \underline{2}, \underline{4}, \underline{7}, \underline{14}, \underline{28}$   
 $\underline{1}, \underline{2}, \underline{3}, \underline{6}, \underline{7}, \underline{14}, \underline{21}, \underline{42}$   
GCF = 14
- 5)  $\underline{1}, \underline{2}, \underline{3}, \underline{6}, \underline{9}, \underline{18}$   
 $\underline{1}, \underline{3}, \underline{9}, \underline{27}, \underline{81}$   
GCF = 9
- 6)  $\frac{1}{6}$
- 7)  $\frac{8}{15}$
- 8)  $\frac{6}{30}$
- 9)  $\frac{28}{35} \div \frac{5}{35} = \frac{28 \div 5}{1} = \frac{28}{5}$  or  $5\frac{3}{5}$
- 10)  $\frac{15}{24} \div \frac{8}{24} = \frac{15 \div 8}{1} = \frac{15}{8}$  or  $1\frac{7}{8}$
- 11)  $\frac{24}{30} \div \frac{5}{30} = \frac{24 \div 5}{1} = \frac{24}{5}$  or  $4\frac{4}{5}$
- 12) done
- 13)  $9\frac{39}{51}$
- 14) 20
- 15)  $\frac{1}{2} + \frac{1}{4} = \frac{4}{8} + \frac{2}{8} = \frac{6}{8}$  eaten  
 $\frac{8}{8} - \frac{6}{8} = \frac{2}{8}$  left
- 16)  $\frac{6}{30} + \frac{10}{30} = \frac{16}{30}$
- 17)  $\frac{1}{3}$  of 36 = 12 girls  
36 - 12 = 24 boys
- 18)  $\frac{4}{5} \times \frac{1}{2} = \frac{4}{10}$

11E

- 1) yes
- 2) no
- 3)  $\underline{1}, \underline{5}, \underline{25}$   
 $\underline{1}, \underline{2}, \underline{3}, \underline{5}, \underline{6}, \underline{10}, \underline{15}, \underline{30}$   
GCF = 5
- 4)  $\underline{1}, \underline{3}, \underline{5}, \underline{9}, \underline{15}, \underline{45}$   
 $\underline{1}, \underline{3}, \underline{9}, \underline{27}$   
GCF = 9
- 5)  $\frac{14}{24}$
- 6)  $\frac{3}{18}$
- 7)  $\frac{15}{24}$
- 8)  $\frac{20}{32} \div \frac{8}{32} = \frac{20 \div 8}{1} = \frac{20}{8}$  or  $2\frac{4}{8}$
- 9)  $\frac{36}{54} \div \frac{9}{54} = \frac{36 \div 9}{1} = 4$
- 10)  $\frac{4}{8} \div \frac{6}{8} = \frac{4 \div 6}{1} = \frac{4}{6}$
- 11)  $\frac{24}{56} < \frac{28}{56}$
- 12)  $\frac{6}{15} > \frac{5}{15}$
- 13)  $\frac{20}{36} < \frac{27}{36}$
- 14) 8
- 15)  $9\frac{45}{74}$
- 16)  $40\frac{10}{22}$
- 17)  $25 \times 52 = 1,300$
- 18)  $\frac{2}{8} + \frac{1}{8} + \frac{4}{8} = \frac{7}{8}$   
 $\frac{8}{8} - \frac{7}{8} = \frac{1}{8}$
- 19)  $\frac{24}{32} \div \frac{4}{32} = \frac{24 \div 4}{1} = 6$
- 20)  $\frac{1}{12} \times \frac{1}{4} = \frac{1}{48}$

11F

- 1) no
- 2) no
- 3)  $\underline{1}, \underline{2}, \underline{4}, \underline{8}, \underline{16}$   
 $\underline{1}, \underline{2}, \underline{17}, \underline{34}$   
GCF = 2
- 4)  $\underline{1}, \underline{2}, \underline{3}, \underline{4}, \underline{6}, \underline{12}$   
 $\underline{1}, \underline{2}, \underline{4}, \underline{5}, \underline{8}, \underline{10}, \underline{20}, \underline{40}$   
GCF = 4
- 5)  $5/18$
- 6)  $3/20$
- 7)  $12/21$
- 8)  $\frac{3}{27} \div \frac{9}{27} = \frac{3 \div 9}{1} = \frac{3}{9}$
- 9)  $\frac{15}{18} \div \frac{12}{18} = \frac{15 \div 12}{1} = \frac{15}{12}$  or  $1\frac{3}{12}$
- 10)  $\frac{16}{32} \div \frac{8}{32} = \frac{16 \div 8}{1} = 2$
- 11)  $\frac{6}{12} < \frac{10}{12}$
- 12)  $\frac{40}{80} = \frac{40}{80}$
- 13)  $\frac{9}{108} < \frac{24}{108}$
- 14) 13
- 15)  $5\frac{19}{79}$
- 16) 28
- 17)  $14 + 14 + 14 + 14 = 56'$  perimeter  
 $\frac{1}{7}$  of 56 = 8' for door openings  
 $56' - 8' = 48'$  baseboard
- 18) yes
- 19)  $\frac{4}{32} + \frac{8}{32} = \frac{12}{32}$   $\frac{3}{8}$
- 20)  $\frac{1}{8}$  of \$48 = \$6  
 $\frac{1}{4}$  of \$48 = \$12  
\$6 + \$12 = \$18  
\$48 - \$18 = \$30

12A

- 1) done
- 2)  $\frac{2}{4} \div \frac{2}{2} = \frac{1}{2}$
- 3)  $\frac{18}{24} \div \frac{6}{6} = \frac{3}{4}$
- 4)  $\frac{8}{12} \div \frac{4}{4} = \frac{2}{3}$
- 5) done
- 6)  $\frac{3}{4}$
- 7)  $\frac{1}{2}$
- 8) done
- 9)  $\underline{1}, \underline{2}, \underline{4}$   
 $\underline{1}, \underline{2}, \underline{3}, \underline{4}, \underline{6}, \underline{8}, \underline{12}, \underline{24}$   
GCF = 4  
 $\frac{4}{24} \div \frac{4}{4} = \frac{1}{6}$
- 10)  $\underline{1}, \underline{2}, \underline{3}, \underline{6}$   
 $\underline{1}, \underline{2}, \underline{3}, \underline{6}, \underline{9}, \underline{18}$   
GCF = 6  
 $\frac{6}{18} \div \frac{6}{6} = \frac{1}{3}$
- 11)  $\underline{1}, \underline{2}, \underline{3}, \underline{6}, \underline{9}, \underline{18}$   
 $\underline{1}, \underline{2}, \underline{3}, \underline{5}, \underline{6}, \underline{10}, \underline{15}, \underline{30}$   
GCF = 6  
 $\frac{18}{30} \div \frac{6}{6} = \frac{3}{5}$