4. $(-6)-(+3)=$
$(-6)+(-3)=-9$
5. $(-13)-(-14)=$
$(-13)+(+14)=+1$
6. $(+39)-(-8)=$
$(+39)+(+8)=+47$
7. $(+76)-(+26)=$
$(+76)+(-26)=+50$
8. $(-24)-(+85)=$
$(-24)+(-85)=-109$
9. $(-35)+(-42)=-77$
10. $(+50)+(-51)=-1$
11. $(+62)-(-12)=$
$(+62)+(+12)=+74$
12. $(-23)-(-8)=$
$(-23)+(+8)=-15$
13. $\frac{3}{10}+\frac{3}{10}=\frac{6}{10}$
14. $\frac{5}{6}-\frac{1}{6}=\frac{4}{6}$
15. $\frac{3}{8}+\frac{2}{8}=\frac{5}{8}$
16. $\frac{9}{11}-\frac{6}{11}=\frac{3}{11}$
17. $\frac{3}{7}+\frac{2}{7}=\frac{5}{7}$ of the candies
18. $35\div5=7$
$7\times3=21$ birds
19. $(-4)+(-5)=-9$ hours
20. 9 hours assigned -10 hours worked $=-1$ hours left to work

Systematic Review 2F

1. $(+4)-(+10)=$
$(+4)+(-10)=-6$
2. $(-3)-(-6)=$
$(-3)+(+6)=+3$
3. $(-2)-(+6)=$
$(-2)+(-6)=-8$
4. $(+7)-(-14)=$
$(+7)+(+14)=+21$
5. $(+12)-(-48)=$
$(+12)+(+48)=+60$
6. $(-8)-(+5)=$
$(-8)+(-5)=-13$
7. $(-13)+(-11)=-24$
8. $(-8)-(+25)=$
$(-8)+(-25)=-33$
9. $(+37)-(-40)=$
$(+37)+(+40)=+77$
10. $(-51)+(+73)=+22$
11. $(-62)+(-65)=-127$
12. $(-16)-(-18)=$
$(-16)+(+18)=+2$
13. $\frac{1}{4}+\frac{2}{4}=\frac{3}{4}$
14. $\frac{6}{7}-\frac{5}{7}=\frac{1}{7}$
15. $\frac{5}{9}-\frac{1}{9}=\frac{4}{9}$
16. $\frac{7}{20}+\frac{3}{20}=\frac{10}{20}$
17. $30\div3=10$
$10\times2=20$ right
$30-20=10$ wrong
18. $\frac{4}{10}-\frac{3}{10}=\frac{1}{10}$ of a pie
19. $(\$-100)+(\$+60)=\$-40$
20. -7 brownies

Lesson Practice 3A

1. $(+5)\times(-6)=-30$
2. $(-6)\times(-7)=+42$
3. $(-9)\times(-10)=+90$
4. $(-10)\times(+12)=-120$
5. $(-5)\times(-8)=+40$
6. $(-16)\times(-11)=+176$
7. $(+4)\times(-15)=-60$
8. $(-18)\times(-6)=+108$
9. $(-16)\times(+12)=-192$
10. $(-17)\times(+3)=-51$
11. $(-18)\times(-4)=+72$
12. $(-24)\times(-5)=+120$

13. $(-11)\times(+16) = -176$
14. $(+3)\times(-24) = -72$
15. $(+8)\times(-12) = -96$
16. $(-10)\times(-16) = +160$
17. $(-3)\times(+6) = -18$ games
18. $(\$-.25)\times(+10) = \$-2.50$
19. $(\$-30)\times(+12) = \$-360$
20. $(+10)\times(+12) = +120$ ft^2

Lesson Practice 3B

1. $(+36)\times(-4) = -144$
2. $(-4)\times(-19) = +76$
3. $(-6)\times(-8) = +48$
4. $(-24)\times(-6) = +144$
5. $(-25)\times(-3) = +75$
6. $(-10)\times(+19) = -190$
7. $(-8)\times(+6) = -48$
8. $(-42)\times(+16) = -672$
9. $(-50)\times(-19) = +950$
10. $(+25)\times(-6) = -150$
11. $(+23)\times(-13) = -299$
12. $(-46)\times(-8) = +368$
13. $(-16)\times(-24) = +384$
14. $(-8)\times(-16) = +128$
15. $(-42)\times(-15) = +630$
16. $(-17)\times(+48) = -816$
17. $(\$-3)\times(+2) = \$-6$
18. $(-10)\times(+5) = -50$ years
19. $(\$-682)\times(+4) = \$-2{,}728$
20. $(-3)\times(+9) = -27$ runs

Lesson Practice 3C

1. $(+8)\times(-5) = -40$
2. $(-6)\times(+10) = -60$
3. $(-3)\times(-4) = +12$
4. $(-20)\times(+12) = -240$
5. $(+17)\times(+3) = +51$
6. $(-8)\times(-9) = +72$
7. $(-90)\times(+4) = -360$
8. $(+24)\times(-8) = -192$
9. $(+42)\times(-6) = -252$
10. $(-10)\times(-10) = +100$
11. $(+7)\times(-6) = -42$
12. $(-18)\times(-4) = +72$
13. $(-36)\times(+4) = -144$
14. $(+13)\times(-4) = -52$
15. $(-17)\times(-3) = +51$
16. $(+19)\times(-51) = -969$
17. $(\$-2)\times(+5) = \$-10$
18. $(-32)\times(+21) = -672$ hairs
19. $(-4)\times(+10) = -40$ losses
20. $(+7)\times(+14) = +98$ ft^2

Systematic Review 3D

1. $(+17)\times(-6) = -102$
2. $(+22)\times(-11) = -242$
3. $(-5)\times(-9) = +45$
4. $(-10)\times(+5) = -50$
5. $(+6)\times(-7) = -42$
6. $(-16)\times(+9) = -144$
7. $(+5)-(+10) =$
   $(+5)+(-10) = -5$
8. $(-6)+(-9) = -15$
9. $(+14)+(-3) = +11$
10. $20\div 2 = 10$
    $10\times 1 = 10$
11. $15\div 3 = 5$
    $5\times 2 = 10$
12. $27\div 9 = 3$
    $3\times 4 = 12$
13. $\frac{1}{10}+\frac{7}{10} = \frac{8}{10}$
14. $\frac{5}{7}-\frac{1}{7} = \frac{4}{7}$
15. $\frac{4}{8}+\frac{1}{8} = \frac{5}{8}$
16. $\frac{7}{12}-\frac{3}{12} = \frac{4}{12}$

17. $\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$
18. $\frac{2}{5} = \frac{4}{10} = \frac{6}{15} = \frac{8}{20}$
19. $(-2) \times (+13) = -26$ gallons
20. $(+9) + (-2) = +7$ miles

Systematic Review 3E

1. $(+16) \times (-10) = -160$
2. $(+17) \times (-10) = -170$
3. $(+23) \times (+11) = +253$
4. $(-8) \times (-4) = +32$
5. $(-7) \times (-8) = +56$
6. $(+10) \times (-11) = -110$
7. $(+8) - (+19) =$
   $(+8) + (-19) = -11$
8. $(+17) + (-5) = +12$
9. $(-63) - (-50) =$
   $(-63) + (+50) = -13$
10. $18 \div 3 = 6$
    $6 \times 1 = 6$
11. $49 \div 7 = 7$
    $7 \times 3 = 21$
12. $44 \div 11 = 4$
    $4 \times 2 = 8$
13. $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$
14. $\frac{5}{6} + \frac{1}{6} = \frac{6}{6}$
15. $\frac{4}{13} + \frac{5}{13} = \frac{9}{13}$
16. $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$
17. $\frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{20}{32}$
18. $\frac{1}{8} + \frac{2}{8} = \frac{3}{8}$ of the house
19. $(\$ + 25) + (\$ - 30) = \$ - 5$
20. $(+5) \times (+5) = +25$ mi^2

Systematic Review 3F

1. $(+14) \times (-5) = -70$
2. $(-18) \times (+11) = -198$
3. $(-9) \times (-12) = +108$
4. $(+14) \times (-6) = -84$
5. $(-19) \times (-23) = +437$
6. $(-19) \times (+17) = -323$
7. $(+32) + (-18) = +14$
8. $(-94) + (-7) = -101$
9. $(+58) - (+100) =$
   $(+58) + (-100) = -42$
10. $20 \div 5 = 4$
    $1 \times 4 = 4$
11. $21 \div 3 = 7$
    $7 \times 2 = 14$
12. $50 \div 10 = 5$
    $5 \times 3 = 15$
13. $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$
14. $\frac{4}{7} - \frac{2}{7} = \frac{2}{7}$
15. $\frac{1}{9} + \frac{5}{9} = \frac{6}{9}$
16. $\frac{1}{6} = \frac{2}{12} = \frac{3}{18} = \frac{4}{24}$
17. $\frac{3}{7} = \frac{6}{14} = \frac{9}{21} = \frac{12}{28}$
18. $\frac{5}{12} - \frac{3}{12} = \frac{2}{12}$ of a pizza
19. $(\$ + 15) \times (+4) = \$ + 60$
20. $(\$ - 20) \times (+4) = \$ - 80$
    $(\$ - 80) + (\$60) = \$ - 20$

Lesson Practice 4A

1. $\frac{-35}{5} = -7$
2. $\frac{-49}{-7} = +7$
3. $\frac{48}{-6} = -8$
4. $\frac{54}{9} = +6$
5. $(15) \div (3) = +5$
6. $(24) \div (-6) = -4$

Application and Enrichment Solutions

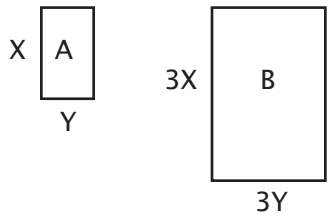
Application and Enrichment Lesson 1

1. $135 \div 9 = 15$;
   $15 \times 2 = 30$ people approved.
   $135 \div 5 = 27$ people disapproved.
   $30 + 27 = 57$ people answered.
   $135 - 57 = 78$ people didn't answer.
   More people didn't answer.
2. $49{,}170 \div 1{,}250 = 39$ r.420
   39 times with 420 mi^2 left over
3. $2 \times \$35.99 = \$71.98$
   $\$71.98 + \$15.95 = \$87.93$
   $\$87.93 - \$5.00 = \$82.93$
   $\$100.00 - \$82.93 = \$17.07$ change
4. $\$17.07 - \$10.00 = \$7.07$ change
   $\$7.07 - \$5.00 = \$2.07$;
   $\$2.07 - \$2.00 = \$0.07$;
   $\$0.07 - \$0.05 = \$0.02$;
   a ten, a five, two ones, a nickel, and two pennies
5. $24 \times 12 = 288$ per case;
   $900 \div 288 = 3.125$
   rounded to next whole number is 4.
6. $1{,}260 \div 60 = 21$ hours
7. $15 + (-33) = -18$;
   $-18 + 5 = -13°$

Application and Enrichment Lesson 2

1. Beginning price was \$60, and he purchased 30 shares, so he spent $30 \times \$60$, or about \$1,800. Ending price was \$45, and he sold 30 shares, so he received $30 \times \$45$, or \$1,350. $\$1{,}800 - \$1{,}350 = \$450$ lost
2. $\frac{3}{8} + \frac{1}{8} + \frac{3}{8} = \frac{7}{8}$ of a mile traveled
   $\frac{8}{8} - \frac{7}{8} = \frac{1}{8}$ of a mile left
3. ran $\frac{3}{8} + \frac{3}{8} = \frac{6}{8} = \frac{3}{4}$ mile
   $5{,}280 \div 4 = 1{,}320$; $1{,}320 \times 3 =$ 3,960 ft running
   jogged $\frac{1}{8}$ mile
   $5{,}280 \div 8 = 660$ ft jogging
   Distance walking is the same as distance jogging, so that is also 660 ft.
4. $21 \times 60 = 1{,}260$ per hour
   $1{,}260 \times 24 = 30{,}240$ per day
   $30{,}240 \times 365 = 11{,}037{,}600$ per year
5. $-5 + 4 - 8 + 10 + 5 - 4 - 6 = -4$ gallons
6. $-4 \times 4 = -16$ qt

Application and Enrichment Lesson 3

1. $68 \div 4 = 17$ units on a side
   17 x 17 = 289 $units^2$
2. 8 x 6 = 48 $units^2$
   16 x 12 = 192 $units^2$
   $192 \div 48 = 4$ times the original
3. $4x3 = 12$ $units^2$
   $12 \div 48 = \frac{1}{4}$ the original
4. 

   area of rectangle A = XY $units^2$
   area of rectangle B = 9XY $units^2$
   $9XY \div XY = 9$
   The area of B is 9 times that of A.
5. 39

6. 13 This can easily be solved by drawing a diagram or a number line.

7. rectangle: $14 \times 16 = 224$ in^2

triangle: $\frac{1}{2} \times 14 \times 15 = 105$ in^2

total: $224 + 105 = 329$ in^2

8. $3.14(15^2) = 706.5$ in^2

$3.14(12^2) = 452.16$ in^2

$706.5 - 452.16 = 254.34$ in^2

Application and Enrichment Lesson 4

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

$\frac{6}{6} - \frac{5}{6} = \frac{1}{6}$

2. $12:00 - 7:30 = 4:30$

$4:30 + 3:00 = 7:30$ hours worked

$7.5 \times 4.65 = \$34.875$, or \$34.88 earned

3. $\frac{3}{4} = \frac{15}{20}$ or $\frac{30}{40}$; $\frac{4}{5} = \frac{16}{20}$ or $\frac{32}{40}$

E. $\frac{31}{40}$

4. $\frac{3}{4} = \frac{18}{24}; \frac{5}{6} = \frac{20}{24}$

A or $\frac{19}{24}$ is an answer.

Check other fractions by using the Rule of Four to compare each with the two given fractions.

E also falls between the given fractions.

$\frac{3}{4} \Leftrightarrow \frac{11}{14}, \frac{42}{56} \Leftrightarrow \frac{44}{56}$

$\frac{5}{6} \Leftrightarrow \frac{11}{14}, \frac{70}{84} \Leftrightarrow \frac{66}{84}$

You can also change each fraction to a decimal for easy comparison.

5. It will be quadrupled:

$3.14(5^2) \approx 78.5$ ft^2

$3.14(10^2) \approx 314$ ft^2

$314 \div 78.5 = 4$

6. $12 \times 22 = 264$ in^2

7. rectangle:

$18 \times 30 = 540$ in^2

paralellogram:

$8 \times 15 = 120$ in^2

$540 - 120 = 420$ in^2

8. area of square:

$36 \times 36 = 1{,}296$ cm^2

semicircles:

$\frac{1}{2}(3.14)(5^2) \approx 39.25$ cm^2

$39.25 \times 4 \approx 157$ cm^2

$1{,}296 - 157 \approx 1{,}139$ cm^2

Application and Enrichment Lesson 5

1. \$1.00

$5 \times \$1.00 = \$5.00$

2. \$2.00 the first day

\$4.00 the second day

\$16.00 the third day

\$256.00 the fourth day

\$65,536.00 the fifth day

\$65,814.00 total

3. $3 \times 2 = 6$ units^2

$9 \times 4 = 36$ units^2

4. Sketches and dimensions will vary. The student should notice that when the dimensions are squared, the area will be squared.

5. Sketches and dimensions will vary. The student should notice that when the dimensions are cubed, the area will be cubed.