

## ANSWERS FOR 5.1

For use with pages 221-223

### 5.1 Practice and Problem Solving

12.  $\frac{12}{17}$       14.  $\frac{2}{7}$   
 16.  $\frac{1}{3}$       18.  $-1\frac{2}{3}$   
 20.  $-\frac{1}{2}$       22.  $-8\frac{4}{7}$   
 24.  $\frac{7h}{13}$       26.  $\frac{a}{10b}$   
 28.  $2\frac{1}{2}$  mm      30.  $6\frac{1}{2}$  in.  
 32.  $-1\frac{2}{5}$       34.  $-\frac{1}{7}$   
 36.  $\frac{1}{8}$       38.  $-\frac{11}{20}$

40. 1 ft  $8\frac{1}{2}$  in.

42.  $\frac{8}{11}$

44. Yes. *Sample Answer:* The total of the numerators will be the total number of students, 100. Because you add the fractions by adding the numerators and keeping the same denominator, the total will be  $\frac{100}{100}$ , or 1.

46.  $\frac{7}{16} + \frac{9}{16} - \frac{11}{16} = \frac{5}{16}$

### 5.1 Mixed Review

48. -23      50. 29  
 52. 76      54. 81  
 56. 20      58. 30  
 60. 12      62. 12.5

### 5.1 Test-Taking Practice

64. I

## ANSWERS FOR 5.2

For use with pages 226-227

### 5.2 Practice and Problem Solving

8.  $1\frac{1}{14}$       10.  $\frac{11}{30}$   
 12.  $-\frac{19}{60}$       14.  $4\frac{4}{5}$   
 16.  $\frac{8}{11}$       18.  $-4\frac{13}{63}$   
 20.  $15\frac{3}{4}$  in.      22. false  
 24.  $-\frac{36t}{91}$       26.  $\frac{54 + 11a}{21a}$   
 28.  $\frac{27}{50}$       30.  $4\frac{1}{24}$       32.  $3\frac{23}{70}$

### 5.2 Mixed Review

34. -63      36. -273  
 38.  $\frac{1}{7} > \frac{1}{8}$       40.  $\frac{5}{12} < \frac{7}{16}$

### 5.2 Test-Taking Practice

42. C

## ANSWERS FOR 5.3

For use with pages 232-233

### 5.3 Practice and Problem Solving

8.  $\frac{6}{25}$       10.  $-\frac{25}{72}$   
 12. -1      14.  $-10\frac{1}{4}$   
 16.  $-24\frac{3}{10}$       18.  $-19\frac{4}{5}$   
 20.  $-\frac{5}{32}$       22. -5  
 24.  $\frac{1}{6}$  c. *Sample Answer:* You will make  $\frac{2}{3}$  of the recipe, and  $\frac{2}{3} \times \frac{1}{4} = \frac{1}{6}$ .  
 26.  $1\frac{7}{8}$  in.<sup>2</sup>      28.  $11\frac{113}{121}$  m<sup>2</sup>  
 30.  $-2\frac{1}{5}$       32.  $2\frac{1}{5}$  sec  
 34.  $1\frac{13}{72}$       36. 80 in.<sup>2</sup>

### 5.3 Mixed Review

38. 3<sup>6</sup>      40. 5<sup>5</sup>  
 42.  $-2\frac{13}{63}$       44.  $-1\frac{43}{176}$

### 5.3 Test-Taking Practice

64. I

## ANSWERS FOR 5.4

For use with pages 236-238

### 5.4 Practice and Problem Solving

12.  $\frac{7}{9}$       14.  $-5\frac{4}{7}$   
 16.  $\frac{2}{11}$       18.  $-\frac{1}{24}$   
 20.  $2\frac{1}{4}$       22.  $2\frac{4}{49}$   
 24.  $1\frac{1}{5}$       26.  $1\frac{3}{13}$   
 28. No; their product is -1, not 1.  
 30. 8      32.  $\frac{4}{9}$   
 34. about  $7\frac{4}{5}$  CDs

36. 20      38.  $-5\frac{2}{3}$

40. \$8      42. 15      44. -8

46. 48 pieces. *Sample Answer:*

$8\frac{1}{2} \div 1\frac{1}{4} = 6\frac{4}{5}$ , and

$11 \div 1\frac{1}{4} = 8\frac{4}{5}$ , so 6 game

pieces will fit across the

$8\frac{1}{2}$ -inch side, and 8 pieces will

fit across the 11-inch side. So, the total number of game pieces that can be cut is  $6 \cdot 8 = 48$ .

### 5.4 Mixed Review

48.  $\frac{8y^2}{5}$       50.  $\frac{2y}{3x}$   
 52.  $3\frac{1}{5}$       54.  $17\frac{1}{7}$

### 5.4 Test-Taking Practice

56. G

## ANSWERS FOR 5.6

For use with pages 249–250

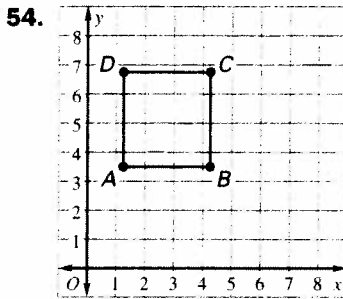
### 5.6 Practice and Problem Solving

12. 3.093      14. -2.17  
 16. -10.89    18. -0.104  
 20. 59.61      22. -1.294  
 24. 32.15      26. 35.5  
 28. -2.06      30. 9.02  
 32. 24          34. 9.6 in.  
 36. 2.52 sec    38. 20.9 cm  
 40. *Sample Answer:* \$125; \$122.92  
 42. 4.975      44. 0.1

### 5.6 Mixed Review

46.  $3^3$       48.  $\frac{4}{m^{10}}$   
 50.  $5\frac{2}{11}$     52.  $2\frac{1}{3}$

### 5.6 Test-Taking Practice



12.5 units

## ANSWERS FOR 5.7

For use with pages 253–254

### 5.7 Practice and Problem Solving

8. 0.72      10. 15.015  
 12. 70      14. 2.5  
 16. -1.5     18. 24.183  
 20. 0.0539    22. 1.2  
 24. 16 packages  
 26. 6.2 mi/h; rounding to leading digits gives  $20 \div 3 = 6.\overline{6}$  which is close to 6.2.  
 28. 0.72      30. 0.4  
 32. 160.31    34. \$1.06  
 36. 250 times

### 5.7 Mixed Review

38. 0.0000000000013  
 40.  $2, \frac{11}{5}, \frac{9}{4}, 2\frac{3}{10}, 2.32, 2.5$   
 42. 9 R1      44. 10 R17

### 5.7 Test-Taking Practice

## ANSWERS FOR 5.8

For use with pages 259–261

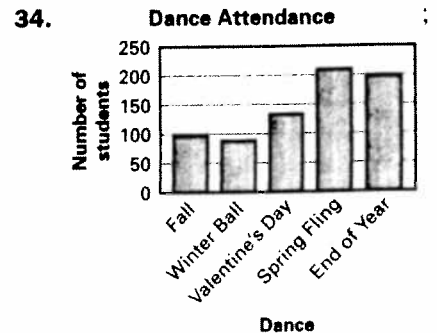
### 5.8 Practice and Problem Solving

8. 15.875 km; 16 km;  
 16 km and 23 km;  
 17 km  
 10. 0.25; 0; 0; 7  
 12. 2013; 2000; none; 460  
 14. 52,327, 49,707, 49,646.  
*Sample Answer:* I think the mean better represents the data because it reflects overall ticket sales.  
 16. *Sample Answer:* If the number of data values is even, there is no single middle value, so the mean of the two middle values is used.  
 18. *Sample Answer:* Even if the lake is shallow overall, there could still be deep holes in it.  
 20. 140 points  
 22. *Sample Answer:*  
 first list: 4, 10, 10;  
 second list: 1, 10, 10, 11

### 5.8 Mixed Review

24. -3    26. 4    28. 5  
 30. -12    32. -3

### 5.8 Test-Taking Practice



mean: 145.2; median: 133.  
*Sample Answer:* The mean; they could find the total number of students by multiplying it by 5; you would also need to know the amount charged per student.

## ANSWERS FOR 5.5

For use with pages 244–246

### 5.5 Practice and Problem Solving

14. 0.75      16. -0.48  
 18. -0.16    20. 3.6875  
 22.  $0.\overline{53}$     24.  $-0.\overline{42}$   
 26.  $-\frac{12}{25}$     28.  $1\frac{31}{100}$   
 30.  $\frac{73}{200}$     32.  $-\frac{3}{2500}$   
 34.  $\frac{2}{9}$       36.  $-\frac{7}{45}$   
 38.  $\frac{7}{11}$       40.  $-\frac{9}{37}$   
 42.  $-\frac{4}{5}, -0.4, -\frac{3}{8}, -\frac{3}{10}, -0.2$   
 44. \$5.25, \$44.50, \$53.38, \$17.44  
 46.  $\frac{1}{8} = 0.125, \frac{1}{12} = 0.08\overline{3},$   
 $\frac{3}{16} = 0.1875, \frac{1}{4} = 0.25,$   
 $\frac{3}{25} = 0.12$ ; cereal, eggs,  
 bagels, pancakes, bacon  
 48. 281 students  
 50. Yes. *Sample Answer:* The improper fraction is equivalent to the mixed number, and the mixed number is the whole number plus the fraction, which is the same as the whole number plus the fraction's equivalent decimal.

52. *Sample Answer:*  $\frac{1}{5}; \frac{1}{5}$  is greater than  $\frac{1}{6}$ , and its decimal form, 0.2, is less than the decimal form for  $\frac{2}{9}, 0.\overline{2}$ .

### 5.5 Mixed Review

54. 6  
 56. 24. *Sample Answer:* I used Make a List to list all of the possible combinations.  
 58. 760      60. 30

### 5.5 Test-Taking Practice

62. I