

Answers to Chapter 5 Exercises

Exercise Set 5.1

1. 67 miles per hour
2. 72 miles per hour
3. 59.5 miles per hour
4. 63.5 miles per hour
5. \$2.40 per pound
6. \$3.75 per pound
7. \$5.60 per pound
8. \$2.40 per pound
9. \$118.50 per door
10. \$38.45 per beam
11. \$12.75 per yard
12. \$13 per foot
13. \$18,000 per acre
14. \$1,400 per acre
15. \$84,000 per acre
16. \$51,000 per acre
17. 12 oz is cheaper
18. 15 oz is cheaper
19. They are the same.
20. 20 rolls is cheaper
21. 235 miles is faster
22. 167 miles is faster
23. 38 nautical miles is faster
24. 204 nautical miles is faster
25. \$98,700 is cheaper
26. \$19,500 is cheaper
27. \$92,750 is cheaper
28. \$26,936 is cheaper
29. 322 miles is better mileage
30. 310 miles is better mileage
31. \$331.50 is cheaper
32. \$172.50 is cheaper
33. \$163.80 is cheaper
34. \$83.20 is cheaper
35. 4.2 earned runs is lower
36. 106 earned runs is lower (barely)
37. 175 turnovers is lower
38. 132 turnovers is lower
39. $x = -\frac{7}{6}$
40. $x = \frac{30}{17}$
41. $y = -\frac{32}{15}$
42. $y = -\frac{21}{10}$
43. $y = \frac{40}{3}$
44. $y = -\frac{75}{4}$
45. $a = -1.5$
46. $a = -2.88$
47. $z = -\frac{14}{3}$
48. $z = -\frac{24}{5}$
49. $w = -36$
50. $w = -\frac{35}{6}$
51. $b = -\frac{27}{2}$
52. $b = -24$
53. $t = -24$
54. $t = -\frac{34}{3}$

55. $x = -10$

57. $x = -11$

59. \$965.91

61. \$273

63. \$8,100

65. \$8.12

67. 52 earned runs

69. 348 assists

71. 345 miles

73. $3\frac{1}{2}$ inches

75. 386.4 miles

77. 8 hours

79. 22.5 feet

81. 7.5 feet

56. $x = -7$

58. $x = \frac{9}{2}$

60. \$3,908.33

62. \$442.25

64. \$18,200

66. \$6,840

68. 2.17 earned runs

70. 260 turnovers

72. 625 miles

74. $4\frac{1}{3}$ inches

76. 288 miles

78. 7.5 hours

80. 46.875 feet

82. 5.6 feet (approximately)

Exercise Set 5.2

1. $\frac{7}{20}$

3. $\frac{12}{25}$

5. $\frac{9}{10}$

7. $\frac{1}{40}$

9. $\frac{13}{200}$

11. $\frac{1}{80}$

13. $\frac{7}{4}$

15. 5

17. 0.84

19. 0.035

21. 1.75

23. 6

2. $\frac{3}{4}$

4. $\frac{14}{25}$

6. $\frac{6}{25}$

8. $\frac{99}{500}$

10. $\frac{11}{250}$

12. $\frac{1}{125}$

14. $\frac{12}{5}$

16. $\frac{16}{5}$

18. 0.5

20. 0.065

22. 2.4

24. 8.5

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|------------------------|-------------------------|
| 25. 0.009 | 26. 0.005 |
| 27. 0.0006 | 28. 0.0008 |
| 29. 50% | 30. 25% |
| 31. 37.5% | 32. 62.5% |
| 33. 625% | 34. 475% |
| 35. 131.25% | 36. 256.25% |
| 37. $44\frac{4}{9}\%$ | 38. $77\frac{7}{9}\%$ |
| 39. $83\frac{1}{3}\%$ | 40. $57\frac{1}{7}\%$ |
| 41. $333\frac{1}{3}\%$ | 42. $416\frac{2}{3}\%$ |
| 43. $271\frac{3}{7}\%$ | 44. $336\frac{4}{11}\%$ |
| 45. 34.8% | 46. 21.5% |
| 47. 65% | 48. 25% |
| 49. 328% | 50. 116% |
| 51. 506.4% | 52. 304.8% |
| 53. 5.69% | 54. 4.98% |
| 55. 0.468% | 56. 0.517% |
| 57. 0.05419% | 58. 0.04906% |
| 59. 14.82% | 60. 18.65% |
| 61. 4.5% | 62. 6.5% |
| 63. 4.5% | 64. 1.8% |
| 65. 57.5% | 66. 37.5% |
| 67. 31.25% | 68. 55% |
| 69. 59.375% | 70. 60% |
| 71. 45.7% | 72. 63.0% |
| 73. 91.1% | 74. 80.4% |
| 75. 15% | 76. 14% |
| 77. 19% | 78. 18% |

Exercise Set 5.3

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|----------|---------|
| 1. 100.8 | 2. 68.4 |
| 3. 1200 | 4. 800 |
| 5. 42% | 6. 56% |
| 7. 322 | 8. 780 |
| 9. 95% | 10. 78% |
| 11. 1200 | 12. 650 |

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|-----|--------------------|-----|--------------------|
| 13. | 1305 | 14. | 1620 |
| 15. | 700 | 16. | 650 |
| 17. | $66\frac{2}{3}\%$ | 18. | 72% |
| 19. | 50 | 20. | 50 |
| 21. | 68 | 22. | 250 |
| 23. | 125% | 24. | 125% |
| 25. | 235 | 26. | 115 |
| 27. | 1260 | 28. | 1380 |
| 29. | $133\frac{1}{3}\%$ | 30. | $166\frac{2}{3}\%$ |
| 31. | 189 | 32. | 352 |
| 33. | 2400 | 34. | 360 |
| 35. | $66\frac{2}{3}\%$ | 36. | $83\frac{1}{3}\%$ |
| 37. | 144 | 38. | 135 |
| 39. | 86 | 40. | 85 |

Exercise Set 5.4

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|-----|-------------------|-----|--------------------|
| 1. | 276 | 2. | 96.2 |
| 3. | 800 | 4. | 500 |
| 5. | 85% | 6. | 72% |
| 7. | 462.5 | 8. | 795.2 |
| 9. | 85% | 10. | 78% |
| 11. | 1320 | 12. | 1450 |
| 13. | 2100 | 14. | 107.9 |
| 15. | 500 | 16. | 600 |
| 17. | $66\frac{2}{3}\%$ | 18. | $83\frac{1}{3}\%$ |
| 19. | 138 | 20. | 174 |
| 21. | 65 | 22. | 52 |
| 23. | 140% | 24. | $138\frac{8}{9}\%$ |
| 25. | 329 | 26. | 48.3 |
| 27. | 95 | 28. | 840 |
| 29. | 180% | 30. | 180% |
| 31. | 969 | 32. | 1026 |
| 33. | 1200 | 34. | 1530 |
| 35. | 85% | 36. | 67% |

37. 500

39. 75

38. 320

40. 105

Exercise Set 5.5

1. 87.5%

3. 1200 points

5. 195 points

7. \$1,069.50

9. \$2,400

11. 6.5%

13. 192 hits

15. 420 attempts

17. 65%

19. \$1,236

21. \$142,000

23. 4.5%

25. \$7,230

27. \$25,600

29. \$1,742

31. \$27,800

33. 120 points

35. \$4500

37. 12.5%

39. 7.5%

41. \$13.50

2. 84 points

4. 85%

6. 600 points

8. \$1,840

10. \$7,800

12. 7.5%

14. 625 at bats

16. 486 free throws

18. 35%

20. \$2,362.50

22. \$66,400

24. 5.8%

26. \$258,000

28. \$1,920

30. \$2,410

32. \$52,500

34. 150 points

36. \$6500

38. 6.5%

40. 2.5%

42. \$68

Chapter 5 Review Exercises

1. 66.5 miles per hour

3. \$12.50 per foot

5. Both are the same.

7. 38 nautical miles is faster

9. 1.6 acres is cheaper

11. $x = \frac{26}{9}$

13. $z = -\frac{14}{3}$

15. $x = -16$

2. \$4.59 per pound

4. \$32,000 per acre

6. 10 rolls is cheaper

8. 123 nautical miles is faster

10. 205 miles is better mileage

12. $y = \frac{21}{20}$

14. $a = -\frac{20}{3}$

16. $x = \frac{13}{2}$

17. \$718.75
19. \$20,784.88
21. 580 miles
23. $\frac{13}{20}$
25. $\frac{9}{2}$
27. 3.6
29. 0.0078
31. 87.5%
33. $266\frac{2}{3}\%$
35. 25.9%
37. 0.529%
39. 2.5%
41. 76%
43. 148.8
45. 364
47. 70%
49. 152
51. 120
53. 282
55. 260
57. 57.5%
59. 500
61. 552.5
63. 92.5%
65. \$1,196.25
67. 250 attempts
69. \$1,530
71. \$15,600
73. \$27,600
18. 372 miles
20. 88 earned runs
22. 10 feet
24. $\frac{6}{5}$
26. $\frac{1}{250}$
28. 0.45
30. 0.006
32. $66\frac{2}{3}\%$
34. 525%
36. 38%
38. 400.75%
40. 62.5%
42. 95%
44. 171.6
46. 650
48. 85%
50. 2600
52. 175%
54. 36.45
56. 400
58. 37.5%
60. 560
62. 120
64. 900 points
66. \$12,600
68. 500 attempts
70. 3%
72. \$1,839.25
74. 12%