



Answer Key

GRADE 5 • MODULE 1

Place Value and Decimal Fractions

Lesson 1

Sprint

Side A

- | | | | |
|---------|---------|-----------|-----------|
| 1. 120 | 12. 920 | 23. 340 | 34. 560 |
| 2. 140 | 13. 180 | 24. 1,340 | 35. 4,560 |
| 3. 150 | 14. 190 | 25. 2,340 | 36. 5,560 |
| 4. 170 | 15. 200 | 26. 3,340 | 37. 9,500 |
| 5. 810 | 16. 300 | 27. 8,340 | 38. 9,500 |
| 6. 810 | 17. 400 | 28. 8,340 | 39. 160 |
| 7. 210 | 18. 800 | 29. 450 | 40. 600 |
| 8. 220 | 19. 800 | 30. 1,450 | 41. 4,930 |
| 9. 230 | 20. 500 | 31. 2,450 | 42. 840 |
| 10. 290 | 21. 900 | 32. 3,450 | 43. 960 |
| 11. 920 | 22. 700 | 33. 9,450 | 44. 5,800 |

Side B

- | | | | |
|---------|---------|-----------|-----------|
| 1. 130 | 12. 830 | 23. 430 | 34. 650 |
| 2. 140 | 13. 280 | 24. 1,430 | 35. 4,650 |
| 3. 150 | 14. 290 | 25. 2,430 | 36. 5,650 |
| 4. 190 | 15. 300 | 26. 3,430 | 37. 9,600 |
| 5. 910 | 16. 400 | 27. 7,430 | 38. 9,600 |
| 6. 910 | 17. 500 | 28. 7,430 | 39. 170 |
| 7. 310 | 18. 900 | 29. 540 | 40. 700 |
| 8. 320 | 19. 900 | 30. 1,540 | 41. 5,820 |
| 9. 330 | 20. 200 | 31. 2,540 | 42. 730 |
| 10. 380 | 21. 600 | 32. 3,540 | 43. 980 |
| 11. 830 | 22. 800 | 33. 8,540 | 44. 4,700 |

Problem Set

1.
 - a. Answer provided
 - b. 345.2
 - c. 3452
 - d. Explanations will vary.
2.
 - a. Answer provided
 - b. 3.45
 - c. .345
 - d. Explanations will vary.
3. 7,234,000; explanations will vary.
4. 320.04
 - a. $3200.4 \div 10 = 320.04$; explanations will vary.
5. 9.5 cm; explanations will vary.

Exit Ticket

1.
 - a. 667.1
 - b. 0.684

Homework

1.
 - a. Answer provided
 - b. 728.1
 - c. 9254
 - d. Explanations will vary.
2.
 - a. Answer provided
 - b. 6.78
 - c. 0.067
 - d. Explanations will vary.
3. 8,912,000
4. 2800.3
 - a. $28.003 \times 100 = 2800.3$; explanations will vary.
5. 251 m; explanations will vary.

Lesson 2

Problem Set

- 540,000
 - 5,400
 - 87
 - 0.87
 - 13
 - 0.013
 - 3,120
 - 40.312
- 193,400
 - 1,934,000
 - 19,340,000
 - Explanations will vary.
- 15.2
 - 1.52
 - 0.152
 - Explanations will vary.
- Explanations will vary; $\frac{20}{100} = 0.20$, $\frac{2}{1000} = 0.002$
- $320,000,000 = 10 \times 32,000,000$; explanations will vary.

Exit Ticket

- 321
 - 363.21
- 455,000
 - 0.455

Homework

1.
 - a. 360,000
 - b. 3,600
 - c. 43
 - d. 0.43
 - e. 240
 - f. 0.024
 - g. 4,540
 - h. 30.454
2.
 - a. 145,600
 - b. 1,456,000
 - c. 14,560,000
 - d. Explanations will vary.
3.
 - a. 0.165
 - b. 0.0165
 - c. Explanations will vary.
4. No; $0.3 \times 100 = 30$; explanations will vary.
5. $1,700,000 \div 10 = 170,000 \text{ km}^2$; explanations will vary.

Lesson 3

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 3 | 12. 21 | 23. 30 | 34. 27 |
| 2. 3 | 13. 21 | 24. 27 | 35. 12 |
| 3. 6 | 14. 24 | 25. 12 | 36. 9 |
| 4. 6 | 15. 24 | 26. 24 | 37. 6 |
| 5. 9 | 16. 27 | 27. 15 | 38. 21 |
| 6. 12 | 17. 27 | 28. 21 | 39. 24 |
| 7. 12 | 18. 30 | 29. 18 | 40. 33 |
| 8. 15 | 19. 30 | 30. 30 | 41. 33 |
| 9. 15 | 20. 9 | 31. 15 | 42. 36 |
| 10. 18 | 21. 3 | 32. 18 | 43. 39 |
| 11. 18 | 22. 6 | 33. 3 | 44. 39 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 3 | 12. 21 | 23. 27 | 34. 12 |
| 2. 3 | 13. 21 | 24. 9 | 35. 27 |
| 3. 6 | 14. 24 | 25. 24 | 36. 6 |
| 4. 6 | 15. 24 | 26. 12 | 37. 21 |
| 5. 9 | 16. 27 | 27. 21 | 38. 9 |
| 6. 12 | 17. 27 | 28. 15 | 39. 24 |
| 7. 12 | 18. 30 | 29. 18 | 40. 33 |
| 8. 15 | 19. 30 | 30. 15 | 41. 33 |
| 9. 15 | 20. 3 | 31. 30 | 42. 39 |
| 10. 18 | 21. 30 | 32. 3 | 43. 39 |
| 11. 18 | 22. 6 | 33. 18 | 44. 36 |

Problem Set

1.
 - a. 10^4
 - b. 10^3
 - c. 10^2
 - d. 10^4
 - e. 10^6
 - f. 10^6
2.
 - a. 9000
 - b. 390,000
 - c. 72
 - d. 7,200
 - e. 4025
 - f. 402,500
 - g. 0.725
 - h. 0.072
3. Explanations will vary.
4. Explanations will vary.
5.
 - a. 3; 300; 3000
 - b. 650; 0.065
 - c. 94,300; 943; 0.943
 - d. 999,000; 9,990,000; 99,900,000
 - e. 0.075; 7,500,000; 750,000,000
 - f. Explanations will vary.
 - g. Explanations will vary.
5.
 - a. Explanations will vary.
 - b. Explanations will vary.

Exit Ticket

1.
 - a. 10^3 ; $10 \times 10 \times 10$
 - b. 10^4 ; $10 \times 10 \times 10 \times 10$
2.
 - a. 300
 - b. 21,600
 - c. 0.8
 - d. 7.542

Homework

1.
 - a. 10^3
 - b. 10^2
 - c. 10^5
 - d. 10^3
 - e. 10^6
 - f. 10^5
2.
 - a. 4,000
 - b. 640,000
 - c. 53
 - d. 5,300
 - e. 6,072
 - f. 607,200
 - g. 0.948
 - h. 0.094
3.
 - a. 2; 200; 2000
 - b. 340; 0.034
 - c. 85,700; 857; 0.857
 - d. 444,000; 4,440,000; 44,400,000
 - e. 0.095; 9,500,000; 950,000,000
4. Answers will vary; $10^4 = 10 \times 10 \times 10 \times 10 = 10,000$
5.
 - a. Answers will vary.
 - b. $247 \div 10^3 = 0.247$; $247 \times 10^3 = 247,000$

Lesson 4

Problem Set

- Answer provided.
 - 1.05 ; $105 \div 10^2 = 1.05$
 - 1.68 ; 168 ; $1.68 \times 10^2 = 168$
 - 80 ; 0.8 ; $80 \div 10^2 = 0.8$
 - 9.2 ; 920 ; $9.2 \times 10^2 = 920$
 - 4 ; 0.04 ; $4 \div 10^2 = 0.04$
 - a, c, e
- 3 ; $3,000$; $3 \times 10^3 = 3,000$
 - 1.2 ; $1,200$; $1.2 \times 10^3 = 3,000$
 - $1,020$; 1.02 ; $1,020 \div 10^3 = 1.02$
 - 97 ; 0.097 ; $97 \div 10^3 = 0.097$
 - 7.28 ; $7,280$; $7.28 \times 10^3 = 7,280$
 - 4 ; 0.004 ; $4 \div 10^3 = 0.004$
 - c, d, f
- 3512
 - 0.08 ; $8 \div 10^2$
 - 0.042 ; $42 \div 10^3$
 - 50 ; $.05 \times 10^3$
 - 0.2 ; 0.002×10^2
- $4.75 \text{ m} = 4,750 \text{ mm}$; $475 \times 10^3 = 4,750$
- $1 \text{ cm} = 0.01 \text{ m}$; $1 \div 102 = 0.01$
- Explanations will vary.

Exit Ticket

- 10^2 ; 200
 - 10^3 ; 0.04
- 390 cm
 - 0.04 m

Homework

1.
 - a. Answer provided.
 - b. 108; 1.08; $108 \div 10^2$
 - c. 2.49; 249; 2.49×10^2
 - d. 50; 0.50; $50 \div 10^2$
 - e. 6.3; 630; 6.3×10^2
 - f. 7; 0.07; $7 \div 10^2$
 - g. b, d, f
2.
 - a. 4; 4000; 4×10^3
 - b. 1.7; 1700; 1.7×10^3
 - c. 1050; 1.050; $1050 \div 10^3$
 - d. 65; 0.065; $65 \div 10^3$
 - e. 4.92; 4920; 4.92×10^3
 - f. 3; .003; $3 \div 10^3$
 - g. a, b, c
3.
 - a. 2638; answer provided.
 - b. 0.07; $7 \div 10^2$
 - c. 0.039; $39 \div 10^3$
 - d. 80; 0.08×10^3
 - e. 0.5; 0.005×10^2
4. 1.49 m = 1490 mm; $1.49 \div 10^3$
5. 2 cm = 0.02 m; $2 \div 10^2$
6. 77 mm = 0.077 m; $77 \div 10^3$

Lesson 5

Sprint

Side A

- | | | | |
|-----------|----------|-----------|------------|
| 1. 623 | 12. 300 | 23. 4,100 | 34. 91.9 |
| 2. 6,230 | 13. 0.2 | 24. 7,600 | 35. 1,820 |
| 3. 62,300 | 14. 2 | 25. 10 | 36. 14,700 |
| 4. 736 | 15. 20 | 26. 70 | 37. 202.1 |
| 5. 7,360 | 16. 0.08 | 27. 7.2 | 38. 1,721 |
| 6. 73,600 | 17. 0.8 | 28. 8.02 | 39. 64 |
| 7. 6 | 18. 8 | 29. 19 | 40. 82 |
| 8. 0.6 | 19. 3.2 | 30. 7,412 | 41. 96 |
| 9. 0.06 | 20. 6.7 | 31. 680 | 42. 39 |
| 10. 3 | 21. 91 | 32. 49.01 | 43. 124.8 |
| 11. 30 | 22. 74 | 33. 1,607 | 44. 564.8 |

Side B

- | | | | |
|-----------|----------|-----------|------------|
| 1. 461 | 12. 900 | 23. 5,200 | 34. 81.8 |
| 2. 4,610 | 13. 0.4 | 24. 8,700 | 35. 2,930 |
| 3. 46,100 | 14. 4 | 25. 10 | 36. 25,800 |
| 4. 892 | 15. 40 | 26. 80 | 37. 303.2 |
| 5. 8,920 | 16. 0.07 | 27. 0.83 | 38. 2,831 |
| 6. 89,200 | 17. 0.7 | 28. 9.03 | 39. 42 |
| 7. 3 | 18. 7 | 29. 17 | 40. 66 |
| 8. 0.3 | 19. 4.5 | 30. 8,523 | 41. 93 |
| 9. 0.03 | 20. 7.8 | 31. 790 | 42. 36 |
| 10. 9 | 21. 28 | 32. 58.02 | 43. 84.4 |
| 11. 90 | 22. 19 | 33. 2,708 | 44. 524.4 |

Problem Set

- Answer provided.
 - 0.024
 - 1.324
 - 0.608
 - 600.008
 - 0.046
 - 3.946
 - 200.904
- 5 thousandths
 - Eleven and thirty-seven thousandths
 - Four hundred three and six hundred eight thousandths
- Answer provided.
 - $2 \times \frac{1}{10} + 4 \times \frac{1}{100} + 9 \times \frac{1}{1000}$
 - $5 \times 10 + 7 \times 1 + 2 \times \frac{1}{10} + 8 \times \frac{1}{100} + 1 \times \frac{1}{1000}$
- 74.692
 - 530.809
 - 4,207.034
- Both of them; explanations will vary.

Exit Ticket

- 0.009
- $\frac{29}{1000}$
- Twenty-four and three hundred fifty-seven thousandths
 - $2 \times 10 + 4 \times 1 + 3 \times 0.1 + 5 \times 0.01 + 7 \times 0.001$
 - 2 tens 4 ones 3 tenths 5 hundredths 7 thousandths

Homework

1.
 - a. Answer provided.
 - b. 0.035
 - c. 9.235
 - d. 800.005
 - e. 0.008
 - f. 0.028
 - g. 7.528
 - h. 300.502
2.
 - a. Eight thousandths
 - b. Fifteen and sixty-two thousandths
 - c. Six hundred seven and four hundred nine thousandths
3.
 - a. Answer provided.
 - b. $3 \times 0.1 + 6 \times 0.01 + 2 \times 0.001$
 - c. $4 \times 10 + 9 \times 1 + 5 \times 0.1 + 6 \times 0.01 + 4 \times 0.001$
4.
 - a. 35.276
 - b. 920.307
 - c. 5,408.065
5.
 - a. $4 \times 1 + 8 \times \frac{1}{10} + 7 \times \frac{1}{100} + 5 \times \frac{1}{1000}$
 - b. $3 \times 1 + 1 \times \frac{1}{10} + 2 \times \frac{1}{100} + 5 \times \frac{1}{1000}$
6. Nancy: $4 \times 100 + 1 \times 10 + 2 \times 1 + 6 \times \frac{1}{10} + 3 \times \frac{1}{100} + 8 \times \frac{1}{1000}$
Charles: $4 \times 100 + 1 \times 10 + 2 \times 1 + 6 \times 0.1 + 3 \times 0.01 + 8 \times 0.001$

Lesson 6

Problem Set

- <; >; completed place value chart; explanations will vary.
- <
 - =
 - =
 - =
 - >
 - =
 - >
 - <
 - <
 - <
 - <
- 3.04; 3.049; 3.05; 3.059
 - 182.025; 182.05; 182.105; 182.205
- 7.68; 7.608; 7.6; 7.068
 - 439.612; 439.261; 439.216; 439.126
- No; answers will vary; Angel has $\frac{500}{1000}$ L, but Lance has $\frac{485}{1000}$ L.
- Dr. Hong prescribes the most; Dr. Evans prescribes the least; explanations will vary.

Exit Ticket

- <
- <
- 76.343; 76.342; 76.332; 76.232

Homework

- <
 - =
 - =
 - <
 - >
 - =
 - <
 - >
 - <
 - <
- 8.008; 8.08; 8.081; 8.09
 - 14.200; 14.204; 14.210; 14.240
- 8.58; 8.508; 7.5; 7.058
 - 439.612; 439.261; 439.216; 439.126
- James' hand was bigger; explanations will vary.
- Salvador's plane traveled the farthest distance; Jennifer's plane traveled the shortest distance; explanations will vary.

Lesson 7

Sprint

Side A

- | | | | |
|----------|-----------|-----------|-----------|
| 1. 5 | 12. 0.35 | 23. 8.55 | 34. 0.085 |
| 2. 0.5 | 13. 0.75 | 24. 2.85 | 35. 0.095 |
| 3. 0.005 | 14. 0.15 | 25. 0.035 | 36. 26.5 |
| 4. 15 | 15. 0.015 | 26. 0.135 | 37. 7.85 |
| 5. 1.5 | 16. 0.025 | 27. 0.375 | 38. 1.265 |
| 6. 2.5 | 17. 0.035 | 28. 85 | 39. 29.5 |
| 7. 3.5 | 18. 0.075 | 29. 95 | 40. 9.95 |
| 8. 7.5 | 19. 6.5 | 30. 8.5 | 41. 7.95 |
| 9. 1.5 | 20. 16.5 | 31. 9.5 | 42. 1.595 |
| 10. 0.15 | 21. 38.5 | 32. 0.85 | 43. 1.795 |
| 11. 0.25 | 22. 0.45 | 33. 0.95 | 44. 3.995 |

Side B

- | | | | |
|----------|-----------|-----------|-----------|
| 1. 15 | 12. 0.25 | 23. 0.75 | 34. 0.95 |
| 2. 1.5 | 13. 0.35 | 24. 4.75 | 35. 0.085 |
| 3. 0.15 | 14. 0.65 | 25. 2.35 | 36. 0.095 |
| 4. 0.015 | 15. 0.15 | 26. 0.025 | 37. 36.5 |
| 5. 5 | 16. 0.015 | 27. 0.125 | 38. 6.85 |
| 6. 0.5 | 17. 0.025 | 28. 0.475 | 39. 1.465 |
| 7. 1.5 | 18. 0.035 | 29. 85 | 40. 39.5 |
| 8. 2.5 | 19. 0.065 | 30. 95 | 41. 9.95 |
| 9. 6.5 | 20. 7.5 | 31. 8.5 | 42. 6.95 |
| 10. 1.5 | 21. 17.5 | 32. 9.5 | 43. 1.295 |
| 11. 0.15 | 22. 47.5 | 33. 0.85 | 44. 6.995 |

Problem Set

- 3 ones + 1 tenth; 31 tenths; 310 hundredths
 - 310 hundredths = 3.1
 - 31 tenths = 3.1
 - 0 tens
- 11 tens + 5 ones + 3 tenths + 7 hundredths + 6 thousandths; 115 ones + 3 tenths + 7 hundredths + 6 thousandths; 1,153 tenths + 7 hundredths + 6 thousandths; 11,537 hundredths + 6 thousandths
 - 11,538 hundredths = 115.38
 - 115 ones = 115
 - 12 tens = 120
- 9 tenths + 9 hundredths + 4 thousandths; 99 hundredths + 4 thousandths; 944 thousandths
 - 99 hundredths = 0.99
 - 10 tenths = 1.0
 - 1 one = 1
 - 0 tens = 0
- 2.14 m
- Explanations will vary.

Exit Ticket

- 855 hundredths = 8.55
 - 1 ten = 10

Homework

- 430 hundredths = 4.3
 - 43 tenths = 4.3
 - 4 ones = 4
- 22,529 hundredths = 225.29
 - 225 ones = 225
 - 23 tens = 230
- 898 hundredths = 8.98
 - 90 tenths = 9.0
 - 9 ones = 9
 - 1 ten = 10
- 18.39 m
 - 1,838.6 cm
- Explanations will vary.

Lesson 8

Problem Set

- 32.7; 32.70; 33
 - 142.0; 142.00; 14; 100
- 1,325.5
- 13.74; explanations will vary.
 - 13.65; explanations will vary.

Exit Ticket

- 14.0
 - 382.99

Homework

- 43.6; 43.59; 44
 - 243.9; 243.88; 240; 200
- 285.2 miles
- 18.64; explanations will vary.
 - 18.55; explanations will vary.

Lesson 9

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 3 | 12. 9 | 23. 13 | 34. 50 |
| 2. 3 | 13. 10 | 24. 17 | 35. 3 |
| 3. 3 | 14. 20 | 25. 17 | 36. 17 |
| 4. 3 | 15. 30 | 26. 12 | 37. 12 |
| 5. 4 | 16. 90 | 27. 11 | 38. 5 |
| 6. 4 | 17. 2 | 28. 13 | 39. 13 |
| 7. 4 | 18. 2 | 29. 14 | 40. 60 |
| 8. 14 | 19. 2 | 30. 16 | 41. 5 |
| 9. 13 | 20. 2 | 31. 15 | 42. 19 |
| 10. 14 | 21. 2 | 32. 6 | 43. 20 |
| 11. 8 | 22. 3 | 33. 8 | 44. 70 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 4 | 12. 9 | 23. 14 | 34. 40 |
| 2. 4 | 13. 10 | 24. 18 | 35. 4 |
| 3. 4 | 14. 20 | 25. 18 | 36. 18 |
| 4. 4 | 15. 30 | 26. 13 | 37. 13 |
| 5. 5 | 16. 80 | 27. 12 | 38. 6 |
| 6. 5 | 17. 3 | 28. 14 | 39. 14 |
| 7. 5 | 18. 3 | 29. 15 | 40. 50 |
| 8. 15 | 19. 3 | 30. 17 | 41. 6 |
| 9. 14 | 20. 3 | 31. 16 | 42. 19 |
| 10. 15 | 21. 3 | 32. 7 | 43. 20 |
| 11. 8 | 22. 4 | 33. 9 | 44. 60 |

Problem Set

1.
 - a. 3; 0.3
 - b. 23; 2; 3; 2.3
 - c. 3; 0.03
 - d. 32; 3; 2; 0.32
 - e. 3; 0.003
 - f. 43; 4; 3; 0.043
 - g. 603; 0.603
 - h. 76; 7.6
 - i. 9007; 9.007
2.
 - a. 1.12
 - b. 1.11
 - c. 10.1
 - d. 59.11
 - e. 66.901
 - f. 97.900
3. 2.542; 2.300
6.122 km
4. Pedometer and math apps; explanations will vary.

Exit Ticket

1.
 - a. 12; 1; 2
 - b. 72; 7; 2
1.
 - a. 4.20
 - b. 44.92

Homework

1.
 - a. 7
 - b. 21; 2; 1
 - c. 7
 - d. 34; 3; 4
 - e. 7
 - f. 44; 4; 4
 - g. 507
 - h. 48
 - i. 6,016
2.
 - a. 1.1
 - b. 2.11
 - c. 10.1
 - d. 59.11
 - e. 77.701
 - f. 97.900
3.
 - a. 4,133 km
 - b. 4.126 km
4. \$12.86

Lesson 10

Problem Set

- 3; 0.3
 - 3; 9; 3.009
 - 7; 4; 700.04
 - 21; 0.021
- 0.7
 - 90.79
 - 180.77
 - 7.078
 - 58.054
 - 358.469
- 89.9
 - 0.8
 - 2.5
 - 4.69
 - 5.592
 - 1.81
- No; explanations will vary; 0.47
- \$0.37

Exit Ticket

- 17; 8; 9; 0.9
- 56.077
 - 6.65

Homework

- 6
 - 6; 2
 - 4; 3
 - 33; 3; 3
- 0.9
 - 40.94
 - 319.92
 - 5.092
 - 46.166
 - 737.09
- 269.7
 - 3.4
 - 1.1
 - 3.77
 - 8.196
 - 4.77
- No; explanations will vary; 0.75
- \$3.89

Lesson 11

Problem Set

- $3 \times 0.2 = 0.6$
 - $5 \times 0.02 = 0.1$
 - $3 \times 0.6 = 1.8$
 - $6 \times 0.04 = 0.24$
 - $5 \times 0.7 = 3.5$
 - $0.004 \times 3 = 0.012$
- 21; 0.7; 21.84
 - $24 + 1.2 + 0.3 = 25.5$
 - $12 + 1.8 + 0.15 = 13.95$
 - $80 + 0.28 + 0.02 = 80.3$
- Models will vary; 18.2
- \$8.80

Exit Ticket

- $4 \times 0.3 = 1.2$
- 9 ones; 6 tenths; 3 hundredths; 3; 9; 6; 3; 27 ones + 18 tenths + 9 hundredths = 28.89

Homework

- $2 \times 0.4 = 0.8$
 - $4 \times 0.05 = 0.2$
 - $4 \times 0.7 = 2.8$
 - $3 \times 0.05 = 0.15$
 - $9 \times 0.7 = 6.3$
 - $8 \times 0.006 = 0.048$
- 24 ones; 28 tenths; 36 hundredths; 27.16
 - $6 \times 7.49 = 44.94$
 - $9 \times 3.65 = 32.85$
 - $3 \times 20.175 = 60.525$
- No; area models will vary; 34.4
- \$16.39

Lesson 12

Sprint

Side A

- | | | | |
|---------|------------|-----------|------------|
| 1. 4 | 12. 42.5 | 23. 5.1 | 34. 3.594 |
| 2. 4.5 | 13. 42.58 | 24. 5.8 | 35. 3.585 |
| 3. 4.52 | 14. 41.789 | 25. 5.83 | 36. 3.684 |
| 4. 0.4 | 15. 5 | 26. 5.836 | 37. 4.584 |
| 5. 0.47 | 16. 5.6 | 27. 6.736 | 38. 6.814 |
| 6. 5.47 | 17. 5.62 | 28. 5.746 | 39. 8.643 |
| 7. 0.04 | 18. 5.628 | 29. 5.737 | 40. 7.651 |
| 8. 0.84 | 19. 4.728 | 30. 6.218 | 41. 4.087 |
| 9. 2.84 | 20. 4.638 | 31. 3.01 | 42. 4.28 |
| 10. 40 | 21. 4.629 | 32. 3.51 | 43. 13.589 |
| 11. 42 | 22. 27.148 | 33. 3.59 | 44. 15.501 |

Side B

- | | | | |
|---------|------------|-----------|------------|
| 1. 3 | 12. 33.5 | 23. 4.1 | 34. 2.594 |
| 2. 3.5 | 13. 33.58 | 24. 4.8 | 35. 2.585 |
| 3. 3.53 | 14. 31.789 | 25. 4.83 | 36. 2.684 |
| 4. 0.3 | 15. 4 | 26. 4.836 | 37. 3.584 |
| 5. 0.37 | 16. 4.6 | 27. 5.736 | 38. 5.814 |
| 6. 5.37 | 17. 4.62 | 28. 4.746 | 39. 7.643 |
| 7. 0.03 | 18. 4.628 | 29. 4.737 | 40. 6.751 |
| 8. 0.83 | 19. 3.728 | 30. 5.218 | 41. 3.087 |
| 9. 4.83 | 20. 3.638 | 31. 2.01 | 42. 3.280 |
| 10. 30 | 21. 3.629 | 32. 2.51 | 43. 12.589 |
| 11. 33 | 22. 37.148 | 33. 2.59 | 44. 14.401 |

Problem Set

1.
 - a. Circle 10; answers will vary.
 - b. Circle 21.98; answers will vary.
 - c. Circle 48.176; answers will vary.
 - d. Circle 49.32; answer will vary.
2. 2.20 m; 3 m; answer will vary.
3. ≈ 14 km; 14.48 km; accurate work shown
4. 80×5 is about \$400; answers will vary.

Exit Ticket

1.
 - a. Circle 10.2
 - b. Circle 35.72
2. About 42; answers will vary.

Homework

1.
 - a. Circle 6.3; answers will vary.
 - b. Circle 25.62; answers will vary.
 - c. Circle 42.371; answers will vary.
 - d. Circle 43.38; answers will vary.
2. 33.2 kg
3. \$128.49
4. \$50.64

Lesson 13

Sprint

Side A

- | | | | |
|-----------|-----------|-----------|-----------|
| 1. 4.0 | 12. 8.139 | 23. 7.983 | 34. 6.122 |
| 2. 4.9 | 13. 0.04 | 24. 7.981 | 35. 9.342 |
| 3. 4.93 | 14. 0.047 | 25. 2.6 | 36. 8.047 |
| 4. 4.932 | 15. 1.047 | 26. 2.685 | 37. 9.107 |
| 5. 3.932 | 16. 1.847 | 27. 2.285 | 38. 6.870 |
| 6. 1.932 | 17. 1.837 | 28. 4.513 | 39. 4.548 |
| 7. 0.4 | 18. 1.817 | 29. 3.57 | 40. 6.348 |
| 8. 0.43 | 19. 0.004 | 30. 3.576 | 41. 6.528 |
| 9. 0.439 | 20. 7.004 | 31. 3.536 | 42. 6.546 |
| 10. 8.439 | 21. 7.904 | 32. 7.942 | 43. 6.136 |
| 11. 8.339 | 22. 7.984 | 33. 6.125 | 44. 9.513 |

Side B

- | | | | |
|-----------|-----------|-----------|-----------|
| 1. 5.0 | 12. 8.239 | 23. 7.984 | 34. 7.123 |
| 2. 5.9 | 13. 0.05 | 24. 7.982 | 35. 1.453 |
| 3. 5.93 | 14. 0.057 | 25. 3.6 | 36. 8.057 |
| 4. 5.932 | 15. 1.057 | 26. 3.685 | 37. 1.207 |
| 5. 4.932 | 16. 1.857 | 27. 3.285 | 38. 7.98 |
| 6. 2.932 | 17. 1.847 | 28. 5.524 | 39. 5.548 |
| 7. 0.5 | 18. 1.827 | 29. 4.57 | 40. 7.348 |
| 8. 0.53 | 19. 0.005 | 30. 4.576 | 41. 7.528 |
| 9. 0.539 | 20. 7.005 | 31. 4.536 | 42. 7.546 |
| 10. 8.539 | 21. 7.905 | 32. 6.143 | 43. 7.137 |
| 11. 8.439 | 22. 7.985 | 33. 7.126 | 44. 1.623 |

Problem Set

- 4; 0.4
 - 4; 0.04
 - 12; 0.012
 - 4; 0.4
- 42; 6; 0.6
 - 2; 64; 1; 32; 1.32
 - 12; 64; 6; 32; 6.32
 - 42; 6; 7 tenths + 1 hundredth; 0.71
 - 42 tenths \div 6 + 36 thousandths \div 6; 7 tenths + 6 thousandths; 0.706
- 4; 0.4
 - 9; 0.009
- No; explanations will vary; 0.8
 - No; explanations will vary; 8
 - Yes; explanations will vary.
- 3.12 doses or 3 full doses
- \$0.41

Exit Ticket

- 9; 0.9
 - 8; 0.08
 - 3; 0.003
- 45; 9; 0.9
 - 6; 12; 1; 2; 1.02

Homework

- 5; 0.5
 - 4; 0.04
 - 9; 0.009
- 9; 36; 3; 12; 3.12
 - 36; 12; 12; 4; 12.004
 - 35; 5; 7 tenths + 1 hundredth; 0.71
 - 35 tenths \div 5 + 45 thousandths \div 5; 7 tenths + 9 thousandths; 0.709
- 3; 0.3
 - 6; 0.006
- No; explanations will vary; 0.09
 - Yes; explanations will vary.
 - No; explanations will vary; 9
- \$1.21
- 6.32 L

Lesson 14

Problem Set

- 1.412
 - 0.662
- 0.26
 - 1.82
 - 3.49
- Explanations will vary; 0.21
- 0.37 m
- \$0.12; accurate tape diagram shown.

Exit Ticket

- 2.686
- 0.144

Homework

- 1.747
 - 1.343
- 0.16
 - 1.29
 - 2.734
- \$13.56
- 0.4 lb

Lesson 15

Sprint

Side A

- | | | | |
|-----------|------------|-------------|--------------|
| 1. 100 | 12. 4,000 | 23. 2,400 | 34. 914,000 |
| 2. 100 | 13. 4,000 | 24. 2,470 | 35. 91,040 |
| 3. 1,000 | 14. 4,200 | 25. 2,407 | 36. 91,070 |
| 4. 1,000 | 15. 4,280 | 26. 2,400.7 | 37. 120 |
| 5. 10,000 | 16. 4,283 | 27. 53,000 | 38. 350 |
| 6. 10,000 | 17. 50,000 | 28. 53,000 | 39. 54,920 |
| 7. 300 | 18. 50,000 | 29. 53,800 | 40. 8,040 |
| 8. 300 | 19. 57,000 | 30. 53,080 | 41. 71,090 |
| 9. 310 | 20. 57,300 | 31. 53,082 | 42. 5.8 |
| 10. 315 | 21. 57,310 | 32. 91,000 | 43. 20,780 |
| 11. 315.7 | 22. 2,400 | 33. 91,000 | 44. 42,007.9 |

Side B

- | | | | |
|-----------|------------|-------------|--------------|
| 1. 100 | 12. 5,000 | 23. 4,200 | 34. 814,000 |
| 2. 100 | 13. 5,000 | 24. 4,270 | 35. 81,040 |
| 3. 1,000 | 14. 5,200 | 25. 4,207 | 36. 81,070 |
| 4. 1,000 | 15. 5,280 | 26. 4,200.7 | 37. 130 |
| 5. 10,000 | 16. 5,283 | 27. 35,000 | 38. 530 |
| 6. 10,000 | 17. 70,000 | 28. 35,000 | 39. 43,910 |
| 7. 400 | 18. 70,000 | 29. 35,800 | 40. 7,030 |
| 8. 400 | 19. 75,000 | 30. 35,080 | 41. 61,090 |
| 9. 410 | 20. 75,300 | 31. 35,082 | 42. 8.5 |
| 10. 415 | 21. 75,310 | 32. 81,000 | 43. 30,870 |
| 11. 415.7 | 22. 4,200 | 33. 81,000 | 44. 53,009.7 |

Problem Set

1.
 - a. 0.25
 - b. 1.425
2.
 - a. 0.45
 - b. 1.82
 - c. 1.5
 - d. 0.245
 - e. 1.55
 - f. 22.75
3. 1.25 kg
4. 3.25 L

Exit Ticket

1. 0.225
2. 1.96

Homework

1.
 - a. 0.175
 - b. 1.62
2.
 - a. 0.35
 - b. 0.65
 - c. 2.25
 - d. 0.46
 - e. 2.35
 - f. 11.375
3. 1.74 m
4. 1.425 gal

Lesson 16

Sprint

Side A

- | | | | |
|-----------|------------|------------|-------------|
| 1. 100 | 12. 4,000 | 23. 34 | 34. 8.14 |
| 2. 100 | 13. 4,000 | 24. 34.7 | 35. 8.104 |
| 3. 1,000 | 14. 4,200 | 25. 34.07 | 36. 9.107 |
| 4. 1,000 | 15. 4,280 | 26. 34.007 | 37. 1.2 |
| 5. 10,000 | 16. 4,283 | 27. 63 | 38. 0.35 |
| 6. 10,000 | 17. 50,000 | 28. 63 | 39. 4.592 |
| 7. 300 | 18. 50,000 | 29. 63.8 | 40. 6.04 |
| 8. 300 | 19. 57,000 | 30. 63.08 | 41. 6.108 |
| 9. 310 | 20. 57,300 | 31. 63.082 | 42. 0.078 |
| 10. 315 | 21. 57,310 | 32. 8.1 | 43. 40.87 |
| 11. 315.7 | 22. 2,400 | 33. 8.1 | 44. 520.709 |

Side B

- | | | | |
|-----------|-----------|------------|-------------|
| 1. 100 | 12. 6 | 23. 43.7 | 34. 9.14 |
| 2. 100 | 13. 6 | 24. 43.7 | 35. 9.104 |
| 3. 1,000 | 14. 6.2 | 25. 43.07 | 36. 8.107 |
| 4. 1,000 | 15. 6.28 | 26. 43.007 | 37. 1.7 |
| 5. 10,000 | 16. 6.283 | 27. 73 | 38. 0.45 |
| 6. 10,000 | 17. 7 | 28. 73 | 39. 5.492 |
| 7. 5 | 18. 7 | 29. 73.8 | 40. 4.06 |
| 8. 5 | 19. 7.6 | 30. 73.08 | 41. 7.108 |
| 9. 5.1 | 20. 7.63 | 31. 73.082 | 42. 0.087 |
| 10. 5.16 | 21. 7.631 | 32. 9.1 | 43. 60.47 |
| 11. 5.167 | 22. 43 | 33. 9.1 | 44. 720.509 |

Problem Set

- \$31.50
 - \$42
- Ava: 112 cm
Olivia: 89 cm
- \$96.01
- 1.675 lb
- 8.85 kg
 - 3; explanations will vary.

Exit Ticket

- Word problems will vary; Jim's dog weighs 5.41 lb; $\frac{2}{3}$ of John's dog's weight is 10.82 lb.

Homework

- 6.55 m
- \$127.05
 - \$1,172.95
- 9.73 lb
- 0.744 L