



## 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

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

### Exit Ticket

1. a. 321  
b. 363.21
2. a. 455,000  
b. 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. 0.165  
0.0165  
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.  
h. 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

1. a. Answer provided.  
b.  $1.05; 105 \div 10^2 = 1.05$   
c.  $1.68; 168; 1.68 \times 10^2 = 168$   
d.  $80; 0.8; 80 \div 10^2 = 0.8$   
e.  $9.2; 920; 9.2 \times 10^2 = 920$   
f.  $4; 0.04; 4 \div 10^2 = 0.04$   
g. a, c, e
2. a.  $3; 3,000; 3 \times 10^3 = 3,000$   
b.  $1.2; 1,200; 1.2 \times 10^3 = 1,200$   
c.  $1,020; 1.02; 1,020 \div 10^3 = 1.02$   
d.  $97; 0.097; 97 \div 10^3 = 0.097$   
e.  $7.28; 7,280; 7.28 \times 10^3 = 7,280$   
f.  $4; 0.004; 4 \div 10^3 = 0.004$   
g. c, d, f
3. a. 3512  
b.  $0.08; 8 \div 10^2$   
c.  $0.042; 42 \div 10^3$   
d.  $50; .05 \times 10^3$   
e.  $0.2; 0.002 \times 10^2$
4.  $4.75 \text{ m} = 4,750 \text{ mm}; 475 \times 10^3 = 4,750$
5.  $1 \text{ cm} = 0.01 \text{ m}; 1 \div 10^2 = 0.01$
6. Explanations will vary.

### Exit Ticket

1. f.  $10^2; 200$   
g.  $10^3; 0.04$
2. a.  $390 \text{ cm}$   
b.  $0.04 \text{ m}$

**Homework**

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

## 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**

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

**Exit Ticket**

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

1. <; >; completed place value chart; explanations will vary.
2. a. <  
b. =  
c. =  
d. =  
e. >  
f. =  
g. >  
h. <  
i. <  
j. <  
k. <
3. a. 3.04; 3.049; 3.05; 3.059  
b. 182.025; 182.05; 182.105; 182.205
4. a. 7.68; 7.608; 7.6; 7.068  
b. 439.612; 439.261; 439.216; 439.126
5. No; answers will vary; Angel has  $\frac{500}{1000}$  L, but Lance has  $\frac{485}{1000}$  L.
6. Dr. Hong prescribes the most; Dr. Evans prescribes the least; explanations will vary.

### Exit Ticket

1. <
2. <
3. 76.343; 76.342; 76.332; 76.232

### Homework

1. a. <  
b. =  
c. =  
d. <  
e. >  
f. =  
g. <  
h. >  
i. <  
j. <
2. a. 8.008; 8.08; 8.081; 8.09  
b. 14.200; 14.204; 14.210; 14.240
3. a. 8.58; 8.508; 7.5; 7.058  
b. 439.612; 439.261; 439.216; 439.126
4. James' hand was bigger; explanations will vary.
5. 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**

1. 3 ones + 1 tenth; 31 tenths; 310 hundredths  
 a.  $310 \text{ hundredths} = 3.1$   
 b.  $31 \text{ tenths} = 3.1$   
 c. 0 tens
2. 11 tens + 5 ones + 3 tenths + 7 hundredths + 6 thousandths; 115 ones + 3 tenths + 7 hundredths + 6 thousandths; 11,537 hundredths + 6 thousandths  
 a.  $11,538 \text{ hundredths} = 115.38$   
 b.  $115 \text{ ones} = 115$   
 c.  $12 \text{ tens} = 120$
3. 9 tenths + 9 hundredths + 4 thousandths; 99 hundredths + 4 thousandths; 944 thousandths  
 a.  $99 \text{ hundredths} = 0.99$   
 b.  $10 \text{ tenths} = 1.0$   
 c. 1 one = 1  
 d. 0 tens = 0
4. 2.14 m
5. Explanations will vary.

**Exit Ticket**

1. a. 855 hundredths = 8.55  
 b. 1 ten = 10

**Homework**

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

## Lesson 8

### Problem Set

1. a. 32.7; 32.70; 33  
b. 142.0; 142.00; 14; 100
2. 1,325.5
3. a. 13.74; explanations will vary.  
b. 13.65; explanations will vary.

### Exit Ticket

1. a. 14.0  
b. 382.99

### Homework

1. a. 43.6; 43.59; 44  
b. 243.9; 243.88; 240; 200
2. 285.2 miles
3. a. 18.64; explanations will vary.  
b. 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
1. b. 23; 2; 3; 2.3
1. c. 3; 0.03
1. d. 32; 3; 2; 0.32
1. e. 3; 0.003
1. f. 43; 4; 3; 0.043
1. g. 603; 0.603
1. h. 76; 7.6
1. i. 9007; 9.007
2. a. 1.12
2. b. 1.11
2. c. 10.1
2. d. 59.11
2. e. 66.901
2. 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
1. b. 72; 7; 2
1. a. 4.20
1. b. 44.92

**Homework**

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

## Lesson 10

### Problem Set

1. a. 3; 0.3  
b. 3; 9; 3.009  
c. 7; 4; 700.04  
d. 21; 0.021
2. a. 0.7  
b. 90.79  
c. 180.77  
d. 7.078  
e. 58.054  
f. 358.469
3. a. 89.9  
b. 0.8  
c. 2.5  
d. 4.69
4. No; explanations will vary; 0.47
5. \$0.37

### Exit Ticket

1. 17; 8; 9; 0.9
2. a. 56.077  
b. 6.65

### Homework

1. a. 6  
b. 6; 2  
c. 4; 3  
d. 33; 3; 3
2. a. 0.9  
b. 40.94  
c. 319.92  
d. 5.092  
e. 46.166  
f. 737.09
3. a. 269.7  
b. 3.4  
c. 1.1  
d. 3.77
4. No; explanations will vary; 0.75
5. \$3.89

## Lesson 11

### Problem Set

1. a.  $3 \times 0.2 = 0.6$
2. a.  $21; 0.7; 21.84$
- b.  $5 \times 0.02 = 0.1$
- c.  $12 + 1.8 + 0.15 = 13.95$
- d.  $3 \times 0.6 = 1.8$
- e.  $24 + 1.2 + 0.3 = 25.5$
- f.  $6 \times 0.04 = 0.24$
- g.  $80 + 0.28 + 0.02 = 80.3$
- h.  $5 \times 0.7 = 3.5$
- i. Models will vary; 18.2
- j.  $0.004 \times 3 = 0.012$
- k.  $\$8.80$

### Exit Ticket

1.  $4 \times 0.3 = 1.2$
2. 9 ones; 6 tenths; 3 hundredths; 3; 9; 6; 3; 27 ones + 18 tenths + 9 hundredths = 28.89

### Homework

1. a.  $2 \times 0.4 = 0.8$
2. a. 24 ones; 28 tenths; 36 hundredths; 27.16
- b.  $4 \times 0.05 = 0.2$
- c.  $6 \times 7.49 = 44.94$
- d.  $4 \times 0.7 = 2.8$
- e.  $9 \times 3.65 = 32.85$
- f.  $3 \times 0.05 = 0.15$
- g.  $3 \times 20.175 = 60.525$
- h.  $9 \times 0.7 = 6.3$
- i. No; area models will vary; 34.4
- j.  $8 \times 0.006 = 0.048$
- k.  $\$16.39$

## 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.  $\approx 14$  km; 14.48 km; accurate work shown  
4.  $80 \times 5$  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**

1. a. 4; 0.4  
b. 4; 0.04  
c. 12; 0.012  
d. 4; 0.4
2. a. 42; 6; 0.6  
b. 2; 64; 1; 32; 1.32  
c. 12; 64; 6; 32; 6.32  
d. 42; 6; 7 tenths + 1 hundredth; 0.71  
e.  $42 \text{ tenths} \div 6 + 36 \text{ thousandths} \div 6; 7$   
tenths + 6 thousandths; 0.706
3. a. 4; 0.4  
b. 9; 0.009
4. a. No; explanations will vary; 0.8  
b. No; explanations will vary; 8  
c. Yes; explanations will vary.
5. 3.12 doses or 3 full doses
6. \$0.41

**Exit Ticket**

1. a. 9; 0.9  
b. 8; 0.08  
c. 3; 0.003
2. a. 45; 9; 0.9  
b. 6; 12; 1; 2; 1.02

**Homework**

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

## Lesson 14

### Problem Set

1. a. 1.412      b. 0.662
2. a. 0.26      b. 1.82      c. 3.49
3. Explanations will vary; 0.21
4. 0.37 m
5. \$0.12; accurate tape diagram shown.

### Exit Ticket

1. 2.686
2. 0.144

### Homework

1. a. 1.747      b. 1.343
2. a. 0.16      b. 1.29      c. 2.734
3. \$13.56
4. 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 | 3. 1.25 kg |
| b. 1.425   | 4. 3.25 L  |
| 2. a. 0.45 |            |
| b. 1.82    |            |
| c. 1.5     |            |
| d. 0.245   |            |
| e. 1.55    |            |
| f. 22.75   |            |

**Exit Ticket**

1. 0.225
2. 1.96

**Homework**

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

## 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**

1. a. \$31.50  
b. \$42
4. 1.675 lb
2. Ava: 112 cm  
Olivia: 89 cm  
5. a. 8.85 kg  
b. 3; explanations will vary.
3. \$96.01

**Exit Ticket**

1. 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**

1. 6.55 m
2. a. \$127.05  
b. \$1,172.95
3. 9.73 lb
4. 0.744 L