Answers to Course 1 Unit 1 Practice

LESSON 1-1



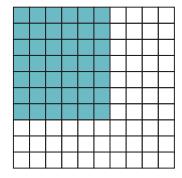
- 2. a. >
 - **b.** >
 - c. <
- **3. a.** 63.5, 63, 48.1, 47.8, 47
 - **b.** 8.91, 8.9, 8.19, 8.1, 8.098
 - **c.** 20.005, 20, 19.06, 2.05, 1.906
- **4.** A
- **5.** No; 0.0135 = 0.01350 When you annex zeros to the right of the last decimal place in a decimal, the value of the decimal stays the same.

LESSON 1-2

- **6. a.** 75
 - **b.** 39.041
 - **c.** 16.17
 - **d.** 0.805
 - **e.** 100.8
- **7.** A
- **8.** 0.36 amps
- **9.** No; The total of the dollar amounts alone is \$10. Liam will need more than \$10 to pay for the fruit.
- **10.** Shade in 75 squares on a 10 by 10 grid to represent 0.75. Next cross out 53 squares representing 0.53. There are 22 squares remaining, representing 0.22. Subtract 3 from 8 which is 5. The answer to this subtraction problem is 5.22.

LESSON 1-3

- **11. a.** 59.2
 - **b.** 22.258
 - **c.** 0.465
 - **d.** 34.375
- **12.** There will be two decimal places in the product of 0.6×0.7



- **13.** Count the number of decimal places in each factor. Then add. The sum will be the number of decimal places in the product.
- **14.** \$12,462.80; Mr. Santaella might round each decimal up to be sure that he has enough money to buy the farmland.
- **15.** C

LESSON 1-4

- **16.** a. 24
 - **b.** 6,705
 - **c.** 78.6
 - **d.** 3.28
- **17.** If I used a calculator to estimate, I would find the exact quotient and round to the appropriate place. If I used pencil and paper, I would use compatible numbers to estimate the quotient.
- **18.** \$19.50
- **19.** A
- **20.** Divide the total cost by the number of items.

LESSON 1-5

- **21. a.** 6.45
 - **b.** 6,180
 - **c.** 5.09
 - **d.** 84
 - **e.** 1.05
- **22.** Answers may vary. You can use compatible numbers. Write $20.48 \div 3.2$ as $21 \div 3$. The quotient is 7. This quotient is close to the actual quotient 6.4. Alternatively, $20 \div 4 = 5$, which is also close.
- **23.** \$91.46
- 24. a. No
 - **b.** You can use compatible numbers to estimate the quotient. $$1,200 \div 12 = 100 .
 - **c.** Madison put the decimal point in the wrong place.
 - **d.** \$108.40
- **25.** B

LESSON 2-1

- **26.** a. $2 \times 2 \times 3 \times 3$
 - **b.** $2 \times 2 \times 2 \times 3 \times 5$
 - c. $2 \times 3 \times 43$
 - **d.** $2 \times 3 \times 3 \times 5 \times 7$
- **27.** Every number with an 0 in the ones place is divisible by 2, 5, and 10.
- **28.** B
- **29.** Possible answers: 100 = 3 + 97; 100 = 11 + 89; 100 = 17 + 83; 100 = 29 + 71; 100 = 41 + 59; 100 = 47 + 53
- **30.** Yes; 137 is not divisible by the small primes 2, 3, 5, 7, or 11. Larger primes do not need to be tested as they divide into 137 fewer than 11 times.

LESSON 2-2

- **31. a.** 81
 - **b.** 125
 - **c.** 100,000,000
 - **d.** 1331
- **32.** a. $3 \times 5 \times 11$
 - **b.** $2^3 \times 3^4$
 - **c.** $2^6 \times 3^3$
 - **d.** $3^2 \times 5^2 \times 7$
- **33.** 5⁴; 25²
- **34.** Yes; Any number to the zero power is 1 and 1 to any power is 1.
- **35.** B

LESSON 3-1

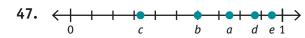
- **36.** a. 1, 2, 3, 6, 9, 18
 - **b.** 1, 2, 3, 4, 6, 8, 12, 24
 - **c.** 1, 5, 7, 35
 - **d.** 1, 2, 4, 7, 14, 35
 - **e.** 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
- **37.** a. 6
 - **b.** 9
 - **c.** 15
 - **d.** 18
 - **e.** 3
- **38.** C
- **39.** possible values include: 15, 30, 60, 75 and other multiples of 15 that are not also multiples of 45.
- **40.** 6

LESSON 3-2

- **41.** B
- **42.** 60
- **43.** a. 24
 - **b.** 45
 - **c.** 60
 - **d.** 120
 - **e.** 90
- **44. a.** 90 jars
 - **b.** 6 boxes of peanut butter jars 5 boxes of jelly jars

LESSON 4-1

- **45. a.** 10
 - **b.** 24
 - **c.** 25
 - **d.** 9
 - **e.** 36
- **46.** a. $\frac{3}{5}$
 - **b.** $\frac{5}{6}$
 - **c.** $\frac{4}{9}$
 - **d.** $\frac{2}{3}$
 - **e.** $\frac{4}{7}$



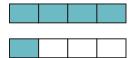
48. I used the calculator to determine that $\frac{19}{20}$ is equivalent to 0.95. I placed the point for the fraction slightly to the left of 1 on the number line.

LESSON 4-2

- **49.** $(\frac{1}{6}, \frac{5}{10}, \frac{3}{2}, \frac{15}{20}, \frac{1}{1})$
 - $\frac{1}{4}$, $\frac{5}{10}$, $\frac{2}{3}$, $\frac{15}{20}$
- **50.** a. $\frac{12}{30}$, $\frac{9}{30}$, $\frac{6}{30}$, $\frac{3}{30}$; $\frac{2}{5}$, $\frac{3}{10}$, $\frac{1}{5}$, $\frac{1}{10}$
 - **b.** $\frac{3}{10}$
- **51.** $\frac{11}{30}$; Since both fractions have the same denominator, the fraction with the greater numerator is greater.
- **52.** a. >
 - **b.** =
 - **c.** <
 - **d.** <
 - e. >

LESSON 4-3

53. Models may vary. Sample model:

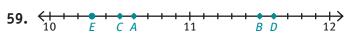


- 54. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{3^{\frac{2}{n}}}$ $\frac{1}{4}$
- **55.** a. $2\frac{1}{4}$
 - **b.** $1\frac{3}{5}$
 - **c.** $2\frac{2}{3}$
 - **d.** $2\frac{1}{2}$
 - **e.** $1\frac{1}{3}$

- **56.** a. $\frac{15}{4}$
 - **b.** $\frac{13}{5}$
 - c. $\frac{11}{8}$
 - **d.** $\frac{23}{6}$
 - **e.** $\frac{14}{3}$
- **57.** $11\frac{2}{3}; \frac{35}{3}$

LESSON 4-4

- 58. a. >
 - **b.** <
 - **c.** =
 - **d.** >
 - e. =



- **60.** Yes; The number $4\frac{16}{10} = 5\frac{6}{10} = 5\frac{3}{5}$.
- **61.** Gavin; $1\frac{1}{2}$ hours is equal to one hour 30 minutes.
- **62. a.** \$24.50
 - **b.** Elana earned more babysitting for Mrs. Re.; Elena earned \$24.50 babysitting for Mrs. Ilg and \$34 babysitting for Mrs. Re.
 - **c.** \$2
- **63.** D

LESSON 5-1

- **64.** B
- **65.** Sample answer: about 18. $\frac{7}{15}$ is about $\frac{1}{2}$. $\frac{1}{2} \times 36$ is 18.

- **66.** a. $\frac{3}{10}$
 - **b.** $\frac{2}{3}$
 - **c.** $6\frac{5}{12}$
 - **d.** $\frac{15}{32}$
 - **e.** $2\frac{2}{9}$
- **67.** 36
- **68. a.** David's Denims
 - **b.** \$14

LESSON 5-2

- **69.** a. $\frac{5}{6}$
 - **b.** 2
 - **c.** $2\frac{1}{4}$
 - **d.** 22
 - **e.** 48
 - **f.** 24
 - **g.** $2\frac{2}{3}$
 - **h.** $6\frac{2}{3}$
 - **i.** $10\frac{1}{2}$
- **70.** B
- **71.** 18; The factor $12\frac{1}{7}$ is about 12. The factor $1\frac{7}{12}$ is about 1.5. The product $12 \times 1.5 = 18$.

72. No; Madison rounded both mixed numbers to 20 which is reasonable. However, she added the dimensions to find area. To find area you need to multiply. The area of the parcel is about 400 square acres.

LESSON 6-1

- **73.** sixths; 30
- 74. a. $\frac{4}{3}$
 - **b.** 2
 - **c.** $\frac{1}{8}$
- **75.** a. $\frac{10}{9}$ or $1\frac{1}{9}$
 - **b.** 20
 - **c.** $\frac{2}{7}$
 - **d.** $\frac{7}{2}$ or $3\frac{1}{2}$
 - **e.** $\frac{2}{3}$
 - **f.** $\frac{49}{5}$ or $9\frac{4}{5}$
 - **g.** $\frac{1}{12}$
 - **h.** $\frac{125}{4}$ or $31\frac{1}{4}$
- **76.** a. >
 - **b.** <
 - **c.** =
- **77.** C

LESSON 6-2

- **78.** a. $\frac{4}{11}$
 - **b.** $\frac{1}{6}$
 - **c.** $\frac{5}{24}$
- **79.** a. 3
 - **b.** 12
 - **c.** $\frac{1}{2}$
- **80.** a. $\frac{7}{12}$
 - **b.** $\frac{8}{7}$ or $1\frac{1}{7}$
 - **c.** $\frac{32}{9}$ or $3\frac{5}{9}$
 - **d.** $\frac{16}{7}$ or $2\frac{2}{7}$
 - **e.** $\frac{5}{16}$
 - **f.** $\frac{6}{7}$
- **81.** a. 24
 - **b.** Answers may vary. Multiplication is the inverse of division. Multiply 10 by $2\frac{2}{5}$ to find the number.
- **82.** D