Written Practice 66

- 1. 1000; There are 100 ones in 100, 10 tenths in one hundred, and 100 × 10 = 1000.
- 2. a. Multiply the number of octopuses by 8.
 - **b. 160 legs;** $20 \times 8 = 160$
- **3. 500;** Round 794 to 800 and 312 to 300, then subtract 800 300 = 500.
- **4. 30 pounds;** The weight of each container is equal to $20 \div 4 = 5$ pounds. This means that 6 containers weigh $6 \times 5 = 30$ pounds.
- **5. 15 inches;** First find the total inches above the ground for both sides, then divide by 2 to find the level point.

$$(21 + 9) \div 2$$

30 $\div 2 = 15$ inches

- 6. $\frac{3}{5} > \frac{4}{9}$; $\frac{3}{5}$ is greater than $\frac{1}{2}$ but $\frac{4}{9}$ is less than $\frac{1}{2}$.
- 7. 1; In the number 96,275 the digit 7 is in the tens place. In the number 4318, the digit in the tens place is 1.
- 8. a. $\frac{3}{10}$
 - b. $\frac{7}{10}$
- 9. 1.4 cm
- **10. 1 decimeter > 1 centimeter;** 1 decimeter is equal to 10 centimeters.

11.
$$1\frac{5}{8}$$
; $1\frac{5}{8}$ pounds $8)\overline{13}$ $\frac{-8}{5}$

12. 520 yards; 200 yards 60 yards

The distance she ran is equal to the perimeter of the block.

$$P = 2I + 2w = 2(200 \text{ yards}) + 2(60 \text{ yards})$$

400 yards + 120 yards
= 520 yards

15. 18,039;
$$34,725$$
 $-16,086$ $-18,039$

20.
$$\frac{1}{3}$$
; $3\frac{2}{3} - \left(2\frac{1}{3} + 1\right)$ $3\frac{2}{3} - 3\frac{1}{3} = \frac{1}{3}$

21.
$$\frac{3}{4}$$
; $4 - \left(2 + 1\frac{1}{4}\right)$

$$\begin{array}{ccc}
4 - 3\frac{1}{4} \\
& & \\
3\frac{4}{4} - 3\frac{1}{4} & = \frac{3}{4}
\end{array}$$

23. \$9.93; \$20 - (\$8 + \$ 2.07)
\$20 - \$10.07
$$$\frac{129}{20}.\cancel{9}0$$
$$-\frac{$10.07}{$ 9.93}$$

- **24.** a. 6 substitutes; 16 10 = 6
 - **b.** C; If they win the next two games then they could have 7 + 2 = 9.
- 25. Frequency Table

Number of Letters	Tally	Freq.
3	1	1
4	П	2
5	11 -	2
6	1	1
7	11	2
8	Ш	3
9	1	1

- **26. 10.1;** The distance from 10 to 11 is divided into ten segments. The arrow indicates a point one tenth greater than 10, which is 10.1.
- 27. Sample:
- 28. Sample: about 3 museums per day; 21 is more than 20, and $21 \div 7 = 3$.
- 29. About 20,000 hectares; multiplying a number by 10 is the same as moving the decimal point in that number one place to the right; 2000 × 10 = 20,000
- **30.** See student work; n = 3; 8 5 = 3

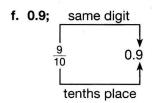
Early Finishers

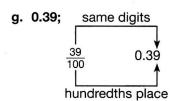
See student work.

Lesson Practice 67

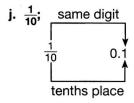
a. ⁷/₁₀; 0.7; The rectangle is divided into 10 equal parts. Seven of the 10 parts are shaded.
 We are told to name the part that is shaded as a fraction and as a decimal number. We write ⁷/₁₀ and 0.7 as our answers.

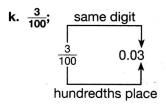
- **b.** $\frac{3}{10}$; **0.3**; The rectangle is divided into 10 equal parts. Three of the 10 parts are unshaded. We are told to name the parts that are unshaded as a fraction and as a decimal number. We write $\frac{3}{10}$ and 0.3 as our answers.
- c. $2\frac{3}{10}$; 2.3; Two whole circles are shaded, and three tenths of another circle is shaded. We write two and three tenths as the mixed number $2\frac{3}{10}$. We write two and three tenths as a decimal number by writing the whole number and then the decimal fraction: 2.3.
- **d.** $\frac{21}{100}$; **0.21**; Twenty-one of the hundred parts are shaded. The common fraction for twenty-one hundredths is $\frac{21}{100}$. The decimal number is 0.21.
- e. $\frac{79}{100}$; 0.79; Seventy-nine of the hundred parts are unshaded. The common fraction for seventy-nine hundredths is $\frac{79}{100}$. The decimal number is 0.79.





- **h.** 1.7; We write the whole number, 1, to the left of the decimal point. To write tenths, we use one place to the right of the decimal point. The mixed number $1\frac{7}{10}$ is equal to 1.7.
- i. 2.99; We write the whole number, 2, to the left of the decimal point. To write hundredths, we use two places to the right of the decimal point. The mixed number $1\frac{9}{100}$ is equal to 2.99.





1.
$$4\frac{9}{10}$$

m.
$$2\frac{54}{100}$$
 (or $2\frac{27}{50}$)

Written Practice

1. 12 books; First find the total number of books, then divide the total by 5 to find the equal number for each stack.

$$(4 \times 15) \div 5$$

60 $\div 5 = 12$ books

2. 5 inches; A square has 4 equal sides, so divide the length by 4.20 ÷ 4 = 5 inches

\$5.74; Step 1: Find the total she paid for both movies.

$$\begin{array}{r} \$ 2.13 \\ \times 2 \\ \hline \$ 4.26 \end{array}$$

Step 2: Find the change.

- **4. Two and three tenths; 2.3;** We write the whole number, 2, to the left of the decimal point. To write tenths, we use one place to the right of the decimal point. The mixed number $2\frac{3}{10}$ is equal to 2.3.
- 5. $\frac{21}{100}$; 0.21; Twenty-one hundredths is written as a common fraction like this $\frac{21}{100}$. A common fraction with a denominator of 100 can be written as a decimal number with two digits after the decimal point. We write the decimal number twenty-one hundredths as 0.21.

- 7. $\frac{7}{10}$; 0.7; The rectangle is divided into 10 equal parts. Seven of the 10 parts are unshaded. We are told to name the part that is unshaded as a fraction and as a decimal number. We write $\frac{7}{10}$ and 0.7 as our answers.
- 8. 2.9 cm; 29 mm
- 9. $\frac{41}{100}$; 0.41; Forty-one of the hundred parts are shaded. The common fraction for forty-one hundredths is $\frac{41}{100}$. The decimal number 0.41.

10.
$$4\frac{3}{8}$$
 ounces; $4\frac{3}{8}$ ounces $8)\overline{35}$ -32

11. $\frac{3}{10}$; 0.3; The distance from 0 to 1 is divided into ten segments. The arrow indicates a point three tenths greater than 0, which is 0.3.

12. 1, 2, and 4;

The factors of 12 are 1, 2, 3, 4, 6, and 12. The factors of 20 are 1, 2, 4, 5, 10, and 20. The factors of 12 that are also the factors of 20 are 1, 2, and 4.

13.
$$\frac{24}{25}$$
; $\frac{12}{25} + \frac{12}{25} = \frac{24}{25}$

14.
$$2\frac{5}{8}$$
; $3\frac{5}{8} - 1 = 2\frac{5}{8}$

15.
$$1\frac{3}{8}$$
; $5 - 3\frac{5}{8}$
 $4\frac{8}{8} - 3\frac{5}{8} = 1\frac{3}{8}$

20.
$$5\frac{2}{3}$$
; $10 - (3 + 1\frac{1}{3})$
 $10 - 4\frac{1}{3}$
 $9\frac{3}{3} - 4\frac{1}{3} = 5\frac{2}{3}$

22. 9600;
$$24 \times 8 \times 50$$

$$\begin{array}{r}
\overset{3}{24} & \overset{41}{192} \\
 \times 8 & \times 50 \\
 \hline
 192 & 9600
\end{array}$$

23.
$$\frac{15}{30}$$
; $\frac{25}{50}$

24. a.
$$\frac{1}{11}$$

b.
$$\frac{6}{11}$$
; There are 6 odd numbers out of the 11.

c. about \$15; Round each item:
Shrimp Salad - \$7.00
Chicken Salad - \$5.00
Fruit Salad - \$3.00
Both drinks - \$0.00 (rounded with

rinks <u>- \$0.00</u> (rounded with about \$15.00 items above)

26. a. Hexagon; The figure has six sides.

b. 2 inches; $12 \div 6 = 2$

27. a. None

b. 6

c. 10

d. 6

28. 40 cm; The perimeter of a square is equal to 4 times one side.

$$P = 4 \times 1 \text{ dm} = 4 \text{ dm} = 40 \text{ cm}$$

29. 19 minutes; sample: subtract the sum of 18 and 8 from 45.

30. A

Lesson Practice 68

a. 2.9; $2\frac{9}{10}$; Two and nine tenths

b. Twenty-four and forty-two hundredths; We break the number into two parts, like this: 24 and 42. We name the whole number part, write "and," and then name the fraction part. Then we write the place value of the last digit, which in this case is hundredths. We write twenty-four and forty-two hundredths.

c. One hundred twenty-five thousandths; We break the number into two parts, like this: 0 and 125. We name the whole number part, write "and," and then name the fraction part. Then we write the place value of the last digit, which in this case is thousandths. We write one hundred twenty-five thousandths.

d. Ten and seventy-five thousandths; We break the number into two parts, like this: 10 and 075. We name the whole number part, write "and," and then name the fraction part. Then we write the place value of the last digit, which in this case is thousandths. We write ten and seventy-five thousandths.

- e. 25.52
- f. 30.1
- g. 7.89
- h. 0.234

i. One and eleven thousandths; 1.011; $\frac{11}{1000}$

j. Two hundred thirty-four thousandths; 0.234; $\frac{234}{1000}$

Written Practice 68

1. 7:50 a.m.

2. 1000 meters; 25 × 40 1000 meters

- **3. 80 pages; 33\frac{1}{3}\%;** $240 \div 3 = 80$; $\frac{1}{3} = 33\frac{1}{3}$
- **4. 5 tickets;** Step 1: Find the cost for one ticket. \$12 ÷ 3 = \$4 per ticket

Step 2: Find the number of tickets he can buy for \$20.

 $20 \div 4$ per ticket = 5 tickets

- 5. $\frac{2}{6}$; $\frac{1}{2}$; $\frac{3}{4}$; $\frac{5}{5}$
- 6. 12; 12 is a multiple of both 4 and 6.
- 7. $\frac{3}{100}$; 0.03; Three of the hundred parts are shaded. The common fraction for three hundredths is $\frac{3}{100}$. The decimal number 0.03.
- **8. 4;** the tenths place is the first digit to the right of the decimal point. The number in this position is 4.
- 9. Two hundred seventy-nine thousandths; We break the number into two parts, like this: 0 and 279. We name the whole number part, write "and," and then name the fraction part. Then we write the place value of the last digit, which in this case is hundredths. We write two hundred seventy-nine thousandths.
- **10.** $1\frac{7}{10}$; **1.7**; The distance from 1 to 2 is divided into ten segments. The arrow indicates a point seven tenths greater than 1, which is $1\frac{7}{10}$ or 1.7.

11.
$$\frac{3}{100}$$
; same digit $\frac{3}{100}$ 0.03 hundredths place

12.
$$8\frac{1}{10}$$
 grams; $8\frac{1}{10}$ grams $10)81$ $\frac{-80}{1}$

15. 333,333;
$$407$$
 819 $\times 819$ $\times 407$ 5783 $+ 32760$ $333,333$

17. 60;
$$600 \div (60 \div 6)$$
 $600 \div 10 = 60$

19. 24 inches; $6 \times 4 = 24$; a hexagon has 6 sides.

21. 840;
$$7 \times 6 \times 5 \times 4$$
 42×20
 42
 $\times 20$

22. 4;
$$5\frac{1}{4} - (3 - 1\frac{3}{4})$$

$$5\frac{1}{4} - (2\frac{4}{4} - 1\frac{3}{4})$$

$$5\frac{1}{4} - 1\frac{1}{4} = 4$$

23. 7;
$$6\frac{6}{6} = 6 + \frac{6}{6} = 6 + 1 = 7$$

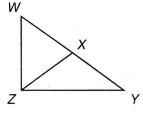
24. 15;
$$w = \frac{300}{20}$$

$$\begin{array}{r} 15 \\ 20)\overline{300} \\ -\underline{20} \\ 100 \\ -\underline{100} \\ 0 \end{array}$$

25. 365 = 365

26. \$3000; sample: I divided \$30,000 by ten to find each tenth.

27. △*XYZ*;



28. a. Heads, tails

b. $\frac{1}{2}$

29. Six hundred twenty-five thousandths

30. 12.75



a. Carina; 37.9 < 38.6

b. 3.21 < 32.1; Although the same digits appear in both numbers in the same order, the numbers are not equal. The number 3.21 is a little more than 3, but it is less than 4. The number 32.1 is more than 32, but less than 33. So 32.1 is greater than 3.21.

c. 2.04, 2.21, 2.4; The whole-number part of each number is 2, so we need to compare the fraction parts. The first digit to the right of the decimal point is in the tenths place. The number 2.04 has a zero in the tenths place, the number 2.21 has a two in the tenths place, and the number 2.4 has a four in the tenths place. This is enough information to order the numbers from least to greatest.

Written Practice 69

1. 900 tiles; $30 \times 30 = 900$

2. \$2.63; \$10 - (\$6.95 + \$0.42)

3. 20 rolls; 20 rolls
50)1000
-100
00
-0

4. 4 times; $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1$

5. 24; The possible factors of 3 between 20 and 30 are 21, 24, and 27. 24 is the only even number.

6. 1 and 5;

The factors of 10 are 1, 2, 5, and 10. The factors of 15 are 1, 3, 5, and 15. The factors of 10 that are the same as 15 are 1 and 5.

7. 44.4 > 4.44; Although the same digits appear in both numbers in the same order, the numbers are not equal. The number 44.4 is a little more than 44, but it is less than 45. The number 4.44 is more than 4, but less than 5. So 44.4 is greater than 4.44.

8. 5; The value of a digit depends upon its place in the number. Here the digit 5 is in the ten thousands place.

9. 7/10; 0.7; There are 10 circles, 3 of which are shaded and 7 that are unshaded. The fraction of unshaded circles is 7/10. The decimal number for the unshaded circles is 0.7.

10. 2.8 cm

11. 9; The value of a digit depends upon its place in the number. Here the digit in the hundredths place is 9.

12. 2¹/₂ inches;

13. Ten and five tenths; We break the number into two parts, like this: 10 and 75. We name the whole number part, write "and," and then name the fraction part. Then we write the place value of the last digit, which in this case is tenths. We write ten and five tenths.

14. 15.12

16. 75;
$$30,000$$
 $-29,925$ 75

18.
$$37\frac{1}{2}$$
; $37\frac{1}{2}$

$$2)75$$

$$-\frac{6}{15}$$

$$-\frac{14}{1}$$

22.
$$2\frac{2}{3}$$
; $7 - \left(3 + 1\frac{1}{3}\right)$

$$\begin{array}{ccc}
7 & - & 4\frac{1}{3} \\
& & \\
6\frac{3}{3} - & 4\frac{1}{3} & = 2\frac{2}{3}
\end{array}$$

23. 7;
$$5\frac{2}{3} + (3\frac{1}{3} - 2)$$

 $5\frac{2}{3} + 1\frac{1}{3} = 6\frac{3}{3} = 6 + \frac{3}{3} = 6 + 1 = 7$

- 25. a. 1; All numbers on the cube are 6 or less.
 - **b. 0;** No numbers on the cube are more than 6.
 - c. $\frac{3}{6}$ (or $\frac{1}{2}$); The numbers 2, 4, and 6 on the cube are even.
- **26. Tenths;** The 7 is in the first place to the right of the decimal point, which is the tenths place. This is reasonable because 7 shows the number of dimes and a dime is a tenth of a dollar.
- 27. $\frac{33}{100}$; 0.33; Thirty-three hundredths

29. a. **9°**;
$$12^{\circ} - 3^{\circ} = 9^{\circ}$$

- **b.** 9 a.m. to 11 a.m.; $4^{\circ}F$; $12^{\circ} 8^{\circ} = 4$
- c. 29°; Water freezes at 32°F, and the 5 a.m. temperature was 3°F; 32° 3° = 29°.
- 30. Khara: 18 times; Tamika: 22 times; Khara visited 3 more times than Brooke: 3 + 15 = 18 times
 Tamika visited 7 more times than Brooke: 7 + 15 = 22 times

Early Finishers

510.86, 510.865, 510.866

Lesson Practice

- 70
- a. 1.200; The number 1.2 is written with one decimal place. By attaching two zeros, we get 1.200, which has three decimal places.
- **b. 4.080**; The number 4.08 is written with two decimal places. By attaching one zero, we get 4.080, which has three decimal places.
- c. 0.500; The number 0.50000 is written with five decimal places. By removing two zeros, we get 0.500, which has three decimal places.
- d. 50 < 500
- e. 0.4 > 0.04
- f. 0.50 = 0.500
- g. 0.2 = 0.20000
- h. 2¢; \$0.02
- i. 50¢; \$0.50
- j. 25¢; \$0.25
- k. 9¢; \$0.09
- I. \$0.60;

m. 68¢; Write the amounts in the same form, then subtract.

n. \$0.20; Write the amounts in the same form, then subtract.

o. 92¢; Write the amounts in the same form, then subtract.

p. \$4.55;

$$0.65$$
 \times 7 0.65 \times 4.55

q. \$3.60;

$$0.18$$
 \times 20 \times 3.60

Written Practice

- 70
- **1. 4 feet;** $4 \times 1 = 4$; The perimeter of a square is equal to 4 times the length of one side.
- **2. 23** years before; 1904 1881 = 23
- **3. 180,000;** Round 307 to 300 and 593 to 600, then multiply $300 \times 600 = 180,000$.
- **4. 15**; $3 \times 5 = 15$
- 5. $\frac{2}{3}$; $66\frac{2}{3}\%$
- 6. $12\frac{1}{2}\%$;
- 7. No; 100 is not divisible by 7 because $100 \div 7 = 14 \text{ R 2}$.
- **8. 3**; The value of a digit depends upon its place in the number. Here the digit 3 is in the tenths place.
- 9. $\frac{1}{100}$; 0.01; One of the hundred parts is shaded. The common fraction for the one hundredth is $\frac{1}{100}$. The decimal number is 0.01.
- **10. 5**; The value of a digit depends upon its place in the number. Here the digit 5 is in the thousandths place.
- **11.** 9 cm; The length of \overline{RS} is equal to

- Segment QS
- + 6 cm 9 cm

3 cm

- 12. Sixteen and twenty-one hundredths
- **13. 1.50**; The number 1.5 is written with one decimal place. By attaching one zero, we get 1.50, which has two decimal places.
- 14. 3.6 = 3.60
- **15. 182,051**; 307 593 $\times 593$ $\times 307$ 4151 + 17790

19.
$$3\frac{9}{10}$$
; $2\frac{3}{10} + 1\frac{3}{10} + \frac{3}{10} = 3\frac{9}{10}$

20.
$$11\frac{5}{8}$$
; $9\frac{4}{8} + \left(4 - 1\frac{7}{8}\right)$

$$\downarrow$$

$$9\frac{4}{8} + \left(3\frac{8}{8} - 1\frac{7}{8}\right)$$

$$9\frac{4}{8} + 2\frac{1}{8} = 11\frac{5}{8}$$

21. 120,000;
$$40 \times 50 \times 60$$
 40
 $\times 50$
 2000×60
 2000
 $\times 60$
 $120,000$

- 23. a. \$0.25
 - b. 25¢
- **24. 53°C**; Each tick mark is an increment of 2°. The temperature is between 52°C and 54°C.

- 25. a. certain
 - b. unlikely
 - c. impossible
- 26. a. 14 trout
 - b. 7 in., 9 in.
 - c. 16 in.
- **27. a. 9;** This number is in the middle of the data set.
 - **b.** 7; This number appears the most often.
 - **c.** 9; 16 7 = 9
- 28. 0.25; twenty-five hundredths
- 29. About 525 light years; sample: I added the light years between Earth and each star; 25 + 63 + 437 = 525.
- 30. Use a compatible number and change 76 to 75. Then double 75 and double the result; $75 \times 2 = 150$ and $150 \times 2 = 300$.

Early Finishers

- Jenna and Peyton; the heights of the plants both have the same whole number, and both numbers have a five in the tenths place.
- b. 2.05 cm, 2.5 cm (and 2.50 cm), 2.55 cm



Focus on

1. Number of Siblings of Students in the Class

