

Chapter 3 - Operations with Decimals - Mid-Chapter Quiz: Lessons 3-1 through 3-5

Write each decimal in word form.

1. 0.6

Write in word form.

six tenths

six tenths

2. 12.65

Write in word form.

twelve and sixty-five hundredths

twelve and sixty-five hundredths

3. 3.0091

Write in word form.

three and ninety-one ten-thousandths

three and ninety-one ten-thousandths

4. 0.25

Write in word form.

twenty-five hundredths

twenty-five hundredths

Write each decimal in standard form and in expanded form.

5. four tenths

Write in standard form.

0.4

Write in expanded form.

4×0.1

0.4; 4×0.1

6. fifteen and seventy-two hundredths

Write in standard form.

15.72

Write in expanded form.

$(1 \times 10) + (5 \times 1) + (7 \times 0.1) + (2 \times 0.01)$

15.72; $(1 \times 10) + (5 \times 1) + (7 \times 0.1) + (2 \times 0.01)$

7. **SKIING** Bianca's speed while cross-country skiing was 2.5 miles per hour. Write this number in two other forms.

Write in word form.

two and five tenths

Or, write in expanded form.

$$(2 \times 1) + (5 \times 0.1)$$

Sample answer: two and five tenths; $(2 \times 1) + (5 \times 0.1)$

Use $>$, $<$, or $=$ to compare each pair of decimals.

8. $0.06 \bullet 0.6$

Place a zero to the right of the last digit of 0.6 so the two numbers have the same number of digits.

$$0.06 \rightarrow 0.06$$

$$0.6 \rightarrow 0.60$$

Compare the corresponding digits.

Since $0 < 6$, $0.06 < 0.60$.

$<$

9. $8.04 \bullet 8.0004$

Place zeros to the right of the last digit of 8.04 so the two numbers have the same number of digits.

$$8.04 \rightarrow 8.0400$$

$$8.0004 \rightarrow 8.0004$$

Compare the corresponding digits.

Since $4 > 0$, $8.04 > 8.0004$

$>$

10. $6.3232 \bullet 6.3202$

$$6.3232$$

$$6.3202$$

Compare the corresponding digits.

Since $3 > 0$, $6.3232 > 6.3202$.

$>$

11. $2.15 \bullet 2.150$

Place a zero to the right of the last digit of 2.15 so the two numbers have the same number of digits.

$$2.15 \rightarrow 2.150$$

$$2.150 \rightarrow 2.150$$

Compare the corresponding digits.

Since $0 = 0$, $2.15 = 2.150$.

$=$

12.

ANIMALS The table shows the length of two of the world's smallest animals. Which animal is smaller?

Animal	Length (inches)
Brazilian Frog	0.33
Dwarf Goby Fish	0.30
Source: The World Almanac for Kids	

$0.33 > 0.30$; So, the dwarf goby fish is smaller.

dwarf goby fish

13. Order 0.101, 0.0101, 0.011, 1.00001 from least to greatest.

Place zeros to the right of the last digits so all the numbers have the same number of digits.

$0.101 \rightarrow 0.10100$

$0.0101 \rightarrow 0.01010$

$0.011 \rightarrow 0.01100$

$1.00001 \rightarrow 1.00001$

The order from least to greatest is

0.0101, 0.011, 0.101, 1.00001.

0.0101, 0.011, 0.101, 1.00001

14. **MULTIPLE CHOICE** Ruben recorded the lengths of his model airplanes in inches. Which list shows the lengths in order from greatest to least?

A 7.2, 7.35, 8.01, 8.10

B 7.35, 7.2, 8.01, 8.10

C 8.01, 8.10, 7.2, 7.35

D 8.10, 8.01, 7.35, 7.2

The order from least to greatest is

8.10, 8.01, 7.35, 7.2.

So, the answer is D.

D

Round each decimal to the indicated place-value position.

15. 8.236; tenths

8.236 has 2 in the tenths place. 3 is the next digit and is not greater than 5. So, 8.236 rounds down to 8.2.

8.2

16. 10.0879; thousandths

10.0879 has 7 in the thousandths place. 9 is the next digit and is greater than 5. So, 10.0879 rounds up to 10.088.

10.088

17. 2.38141; ten-thousandths

2.38141 rounded to the nearest ten-thousandth is 2.3814.

2.3814

18. **SPIDERS** The *Tegenaria atrica* spider can travel at a speed of 20.592 inches per second. What is the speed rounded to the nearest tenth?

20.592 inches per second has 5 in the tenths place. The next digit is 9, which is greater than 5. So, 20.592 rounds up to 20.6.

The answer is 20.6 inches per second.

20.6 inches per second

Estimate using rounding, clustering, or front-end estimation.

19. $18.89 - 4.42$

Round each number to the nearest unit. Then subtract.

$$\begin{aligned} 18.89 - 4.42 &\approx 19 - 4 \\ &= 15 \end{aligned}$$

$$19 - 4 = 15$$

20. $42.33 + 13.48$

Use front-end estimation.

$$\begin{aligned} 42.33 + 13.48 &\approx 42 + 13 \\ &= 55 \end{aligned}$$

$$42 + 13 = 55$$

21. $11.94 + 12.21 + 11.88 + 12.08$

Use clustering.

$$\begin{aligned} 11.94 + 12.21 + 11.88 + 12.08 &\approx 4 \times 12 \\ &= 48 \end{aligned}$$

$$4 \times 12 = 48$$

- 22.

MULTIPLE CHOICE The table shows the weights of four packages that Martin is mailing to his cousin in New Jersey. Estimate the total weight of the packages.

Package	Weight (oz)
1	3.94
2	14.81
3	11.27
4	7.65

- F** 42 ounces
- G** 38 ounces
- H** 34 ounces
- J** 32 ounces

Use rounding. Then add.

$$3.94 + 14.81 + 11.27 + 7.65 \approx 4 + 15 + 11 + 8 \\ = 38$$

G is the correct answer.

G

Find each sum or difference.

23. $67.13 + 31.7$

Write the numbers vertically. Align the decimal points and add

$$\begin{array}{r} 67.13 \\ +31.70 \\ \hline 98.83 \end{array}$$

$$98.83$$

24. $51.2 - 12.94$

Write the numbers vertically. Align the decimal points and subtract.

$$\begin{array}{r} 51.20 \\ -12.94 \\ \hline 27.57 \end{array}$$

$$38.26$$

25. **RESTAURANTS** Andrea has a coupon for \$1.75 off her next purchase of a deli sandwich. If the sandwich originally costs \$5.65, how much will it cost with the coupon?

$$\begin{array}{r} \$5.65 \\ -\$1.75 \\ \hline \$3.90 \end{array}$$

It will cost her \$3.90 the next time she purchases a sandwich.

$$\$3.90$$