



Alhuiteen school EOT1 coverage GRADE 5

Mathematics

Teacher :Alaa Elatawy



Academic Year	2023/2024
العام الدراسي	
Term	1
الفصل	
Subject	Mathematics/Reveal
المادة	الرياضيات/ريفييل
Grade	5
الصف	
Stream	General
المسار	العام
Number of MCQ	15
عدد الأسئلة الموضوعية	
Marks of MCQ	4
درجة الأسئلة الموضوعية	
Number of FRQ	5
عدد الأسئلة المقالية	
Marks per FRQ	(7-10)
الدرجات للأسئلة المقالية	
Type of All Questions	MCQ/ الأسئلة الموضوعية / FRQ/ الأسئلة المقالية
نوع كافة الأسئلة	
Maximum Overall Grade	100
الدرجة القصوى الممكنة	
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation - طريقة التطبيق	Paper-Based
Calculator	Not Allowed
الآلة الحاسبة	غير مسموحة

Part1	Type of Questions	FRQ/ مفالي	الدرجات لكل سؤال	7-10 درجات
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1	a) Find the volume of rectangular prisms using formulas.	(8-10)	Page :44	
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8. A freezer, shaped like a rectangular prism, is 6 feet long, 2 feet wide, and 3 feet tall. What is the volume of the freezer?

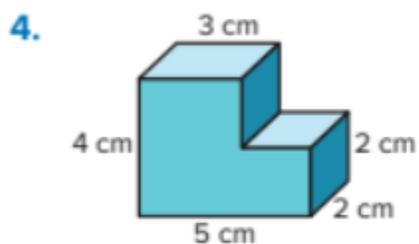
9. An Olympic swimming pool is 2 meters deep. What is the volume of the swimming pool?



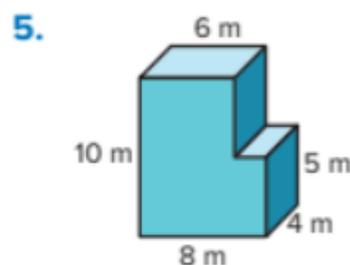
10. **Extend Your Thinking** Do you agree or disagree with this statement? Justify your reasoning. When the edge lengths of a rectangular prism are doubled, the volume is also doubled.

1	b) Find the volume of composite figures.	(4-5)	Page :49	
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Draw line(s) to show how you decomposed the figure.
What is the volume of the figure?

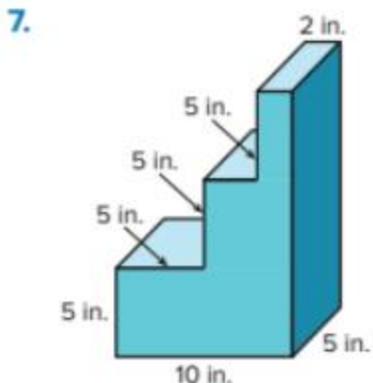
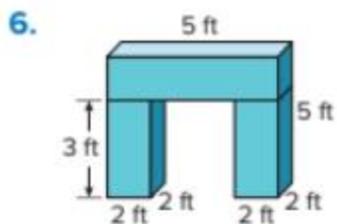


$V =$ _____

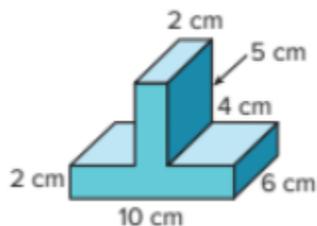


$V =$ _____

Draw line(s) to show how you decomposed the figure.
What is the volume of the figure?



8. STEM Connection An ocean engineer is designing an underwater robot. The robot will have two pieces like the one shown. What is the volume of the robot?



9. A sign company made this letter using rectangular prisms. Each prism is 12 inches by 4 inches by 4 inches. What is the volume of the letter? Explain.



Compare the weights of these bags.

ones	tenths	hundredths	thousandths
3	2	8	1
3	9		

3.281 ○ 3.9



3.281 kg

3.9 kg

Write $>$, $<$, or $=$ in each ○ to make a true comparison. You can use a place-value chart to help.

1. 7.790 ○ 8.7

2. 1.021 ○ 1.095

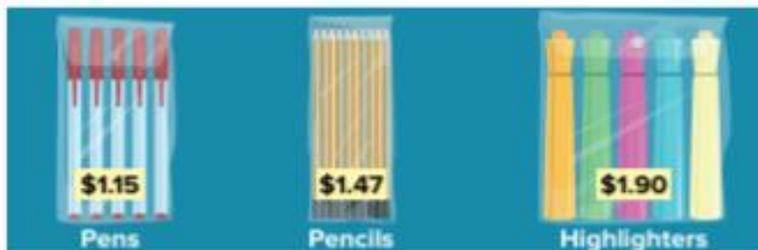
3. 6.55 ○ 5.66

4. 9.9 ○ 0.99

5. 3.41 ○ 3.41

6. 2.563 ○ 2.573

For exercises 7–9, use the cost of each school supply.



7. Do the pencils or the highlighters cost more?

8. Write a comparison statement for the cost of the pens and the pencils.

9. Which school supply is the most expensive? Which school supply is the least expensive? Explain how you know.

2	(b+c) Read and write decimals to thousandths using standard form expanded form, and word form.	(1-12)	Page :73
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What is the word form of the decimal?

1. 8.2
2. 8.02
3. 0.82
4. 0.082

What is the standard form of the decimal?

5. $0.9 + 0.03 + 0.007$
6. $20 + 0.7 + 0.08 + 0.006$
7. $5 + 0.01 + 0.009$
8. $7 + \frac{4}{10} + \frac{5}{1,000}$

What is each decimal in standard form?

What is each decimal in expanded form?

9. ninety-three and six thousandths
10. three and eight hundred forty-six thousandths
11. two hundred twelve and fifteen thousandths
12. seven hundred fifty-one thousandths

MISTAKES
are proof
that you
are
TRYING

2	(b+c) Read and write decimals to thousandths using standard form expanded form, and word form.	(13-15)	Page :74
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13. STEM Connection The Andromeda galaxy is 2.537 million light years from Earth. How can you write this decimal number in expanded form and in word form?



14. Kole wrote the decimal 34.821 in word form as *thirty-four eight hundred twenty-one thousandths*. Is he correct? Explain why or why not.

15. Extend Your Thinking Write the word forms of 321,578 and 321.578. What is the same? Explain why those similarities exist.

3	Use strategies to subtract decimals & Explain the strategy used to subtract decimals.	(1,2,5-8)	Page :121
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Decompose by place value to find the difference.

1. $8.57 - 2.4$

2. $7.73 - 5.1$

$8.57 - 2 = \underline{\hspace{2cm}}$

$7.73 - 5 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} - 0.4 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} - 0.1 = \underline{\hspace{2cm}}$

$8.57 - 2.4 = \underline{\hspace{2cm}}$

$7.73 - 5.1 = \underline{\hspace{2cm}}$

3	Use strategies to subtract decimals & Explain the strategy used to subtract decimals.	(1,2,5-8)	Page :121
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What is the difference? Show your work.

5. $36.33 - 32.29 =$ _____ 6. $48.56 - 18.21 =$ _____

7. $17.10 - 6.02 =$ _____ 8. $25.50 - 11.49 =$ _____

3	Use strategies to subtract decimals & Explain the strategy used to subtract decimals.	13	Page :129
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13. Decompose by place value to subtract. Show your work.

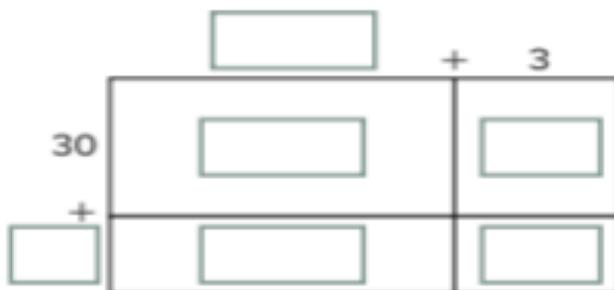
(Lesson 4-7)

$5.70 - 2.08 =$ _____

4	Fluently multiply multi-digit whole numbers using the standard algorithm. - Use an area model and partial products to multiply multi-digit whole numbers -Use partial products to help multiply multi-digit factors.	16	Page :167
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16. Fill in the area model and use partial products to find 53×37 .

(Lesson 5-5)



$53 \times 37 =$ _____

Fluently multiply multi-digit whole numbers using the standard algorithm.

- Use an area model and partial products to multiply multi-digit whole numbers
- Use partial products to help multiply multi-digit factors.

Complete the area model. Then solve to find the product.

1.

	100	+	50	+	4	
30	3,000					
+						
6	600					

2.

	400	+	20	+	1	
50	20,000				50	
+						
2						

What is the product? Use area models to solve.

3. $15 \times 24 = \underline{\hspace{2cm}}$

	24
15	

4. $28 \times 132 = \underline{\hspace{2cm}}$

	132
28	

5. $33 \times 78 = \underline{\hspace{2cm}}$

6. $72 \times 225 = \underline{\hspace{2cm}}$

Write the multiplication equation based on the area model. Then solve to find the product.

7.

	200	+	10	+	8	
20						
+						
8						

8.

	400	+	10	+	6	
60						
+						
3						

4	<p>Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <ul style="list-style-type: none"> - Use an area model and partial products to multiply multi-digit whole numbers -Use partial products to help multiply multi-digit factors. 	(1-6)	Page :153
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Find the unknown partial products. Then find the product.

1.

$$\begin{array}{r}
 325 \\
 \times 73 \\
 \hline
 21,000 \\
 1,400 \\
 350 \\
 \square \\
 \square \\
 + \square \\
 \hline
 \square
 \end{array}$$

2.

$$\begin{array}{r}
 104 \\
 \times 28 \\
 \hline
 32 \\
 800 \\
 \square \\
 + \square \\
 \hline
 \square
 \end{array}$$

What is the product? Use partial products to solve.

3.

$$\begin{array}{r}
 17 \\
 \times 86 \\
 \hline
 \end{array}$$

4.

$$\begin{array}{r}
 24 \\
 \times 129 \\
 \hline
 \end{array}$$

5.

$$\begin{array}{r}
 36 \\
 \times 93 \\
 \hline
 \end{array}$$

6.

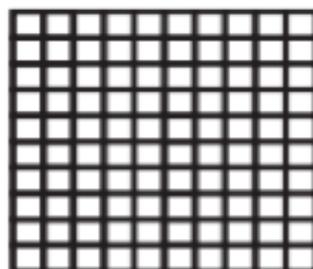
$$\begin{array}{r}
 222 \\
 \times 58 \\
 \hline
 \end{array}$$

"DONUT"
STRESS...
JUST DO
your
BEST

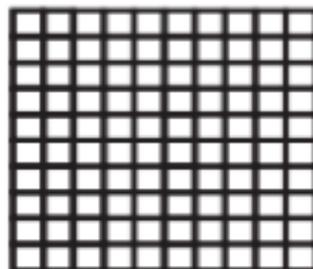
5	a) Use decimal grids to help represent and solve multiplication equations involving decimals..	(1-3)	Page :183
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Write an equation and use a decimal grid to help you solve.

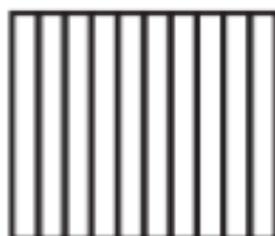
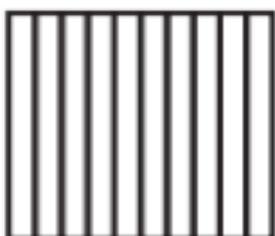
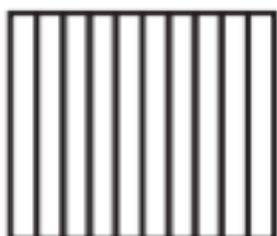
1. Laura pours 0.08 liter of milk into her tea each day. How much milk does Laura use in her tea in one week?



2. Jason buys 0.9 pound of cabbage. The grocery store charges \$0.60 per pound. How much will Jason pay for the cabbage?

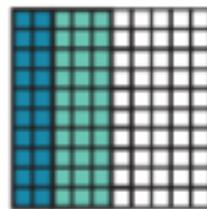
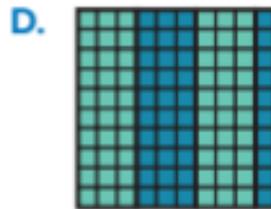
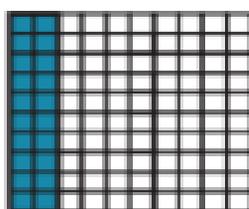
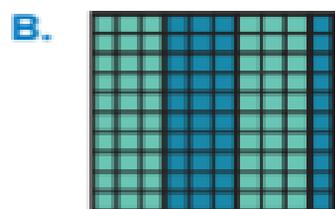
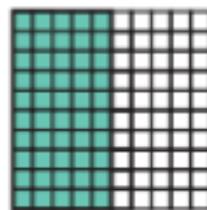
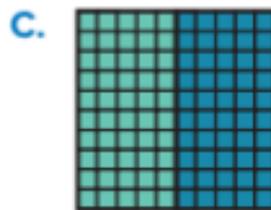
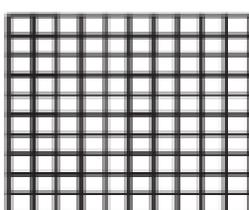
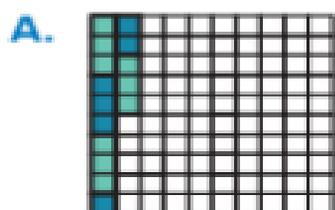


3. Tonya cuts 0.4 meter of ribbon for each gift she wraps. She wraps 6 gifts. How much ribbon does Tonya use?



5	a) Use decimal grids to help represent and solve multiplication equations involving decimals..	15	Page :201
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15. David rides 0.3 miles each day to school. Which model shows how far he rides in 5 days? (Lesson 6-3)

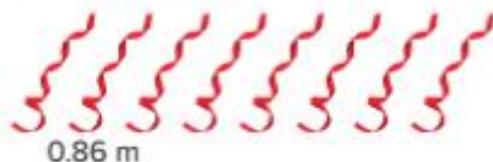


5	b) Understand a variety of strategies to solve multiplication equations involving decimals.	(3-7)	Page :197
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3. Each bottle holds the same amount. How much water can these bottles hold?



4. Rebecca cut these ribbons to the same length. How much ribbon did Rebecca use in all?



5. Experts recommend that people have 4.7 grams of potassium per day. Last week Marcus averaged 0.9 times as much potassium as the recommendation. How much potassium did Marcus average each day last week?

6. A pitcher has a capacity of 3.9 liters. A cooler has a capacity 9.2 times greater. What is the capacity of the cooler?

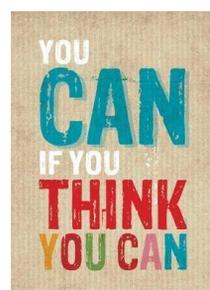
Solve. Explain the strategy used to solve.

7. Kara has a bag of apples. Each apple weighs 0.4 pound on average. There are 17 apples in her bag. What is the total weight of her apples?

5	b) Understand a variety of strategies to solve multiplication equations involving decimals.	(8,12)	Page :200
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8. Deshaun cuts 0.8 meter of tape for each part of his project. There are 7 parts to his project. How much tape does Deshaun use?

(Lesson 6-6)

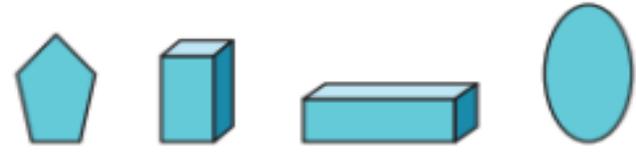


5	b) Understand a variety of strategies to solve multiplication equations involving decimals.	(8,12)	Page :200
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12. A recipe calls for 1.8 liters of milk. If the recipe needs to be tripled, how many liters of milk are needed? (Lesson 6-6)

Part 2	Type of Questions	MCQ/موضوعی	الدرجات لكل سؤال	4 درجات
6	Describe volume as an attribute of solid figures.	(1-7)		Page :35

1. Which of these figures have volume? Justify your reasoning.



For the situation, would you measure the *length*, *area*, or *volume*? Explain.

- 2. the amount of soil needed to fill a flower pot
- 3. the distance of a bike ride
- 4. the amount of wall space covered by a poster
- 5. the amount of concrete needed to fill a patio
- 6. the space inside a moving truck
- 7. the distance around a building

Determine volume by counting unit cubes that fill a solid with no gaps or overlaps & Determine volume by multiplying the number of unit cubes in one layer by the number of layers that fill a solid with no gaps or overlaps.



Determine the volume of the figure.



Number of layers: _____

Number in each layer: _____

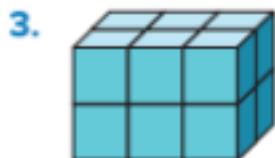
Volume: _____ cubic units



Number of layers: _____

Number in each layer: _____

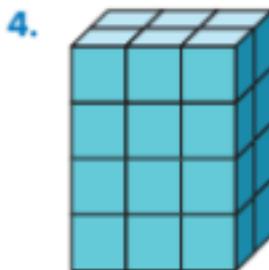
Volume: _____ cubic units



Number of layers: _____

Number in each layer: _____

Volume: _____ cubic units

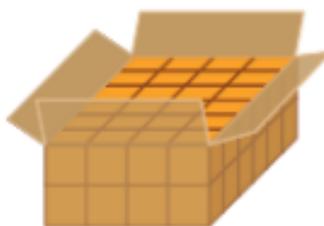


Number of layers: _____

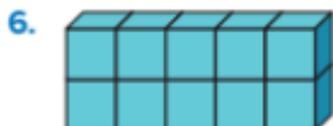
Number in each layer: _____

Volume: _____ cubic units

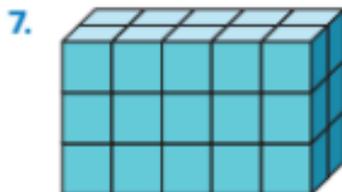
5. How can you determine the volume of the box?



What is the volume of the figure?

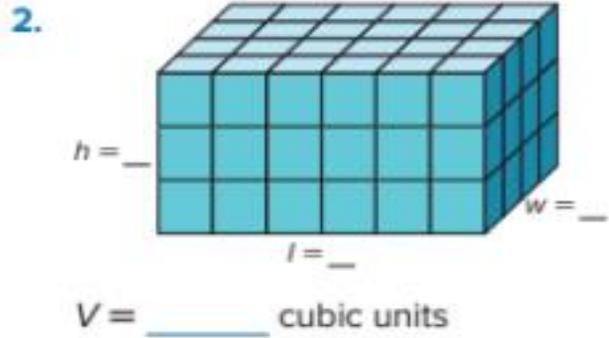
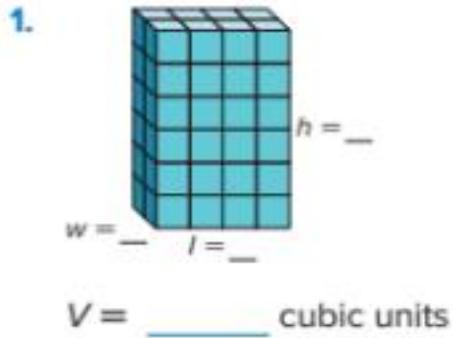


_____ cubic units

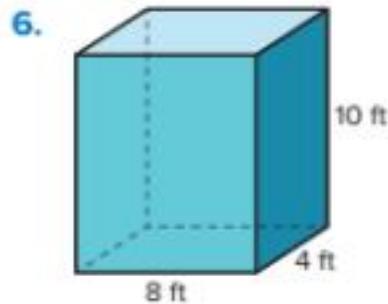
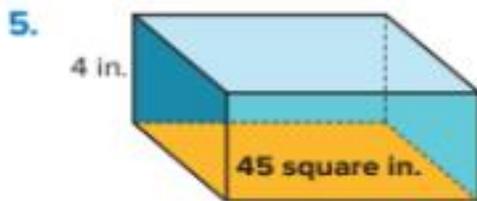
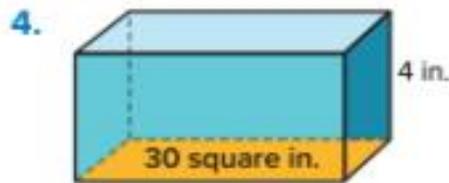
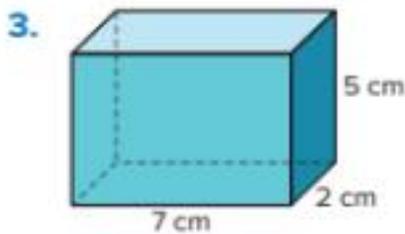


_____ cubic units

Label the dimensions and then determine the volume of the figure.



What is the volume of the figure? Tell which volume formula you used and why.



9. Which equation represents the different ways to find the volume of these figures?

(Lesson 2–3)

Prism A:



Prism B:



A. $(4 \times 3) \times 2 = 4 \times (3 \times 2)$

B. $(3 \times 4) \times 2 = (4 \times 3) + 2$

C. $3 \times (4 \times 2) = (3 \times 4) \times (3 \times 2)$

D. $3 \times (4 + 2) = (3 \times 4) + (3 \times 2)$

8	Explain how to find the volume of rectangular prisms using formulas..	11	Page :57
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11. The volume of a rectangular prism is 48 cubic inches. Which could be the dimensions of the prism?

Select all that apply. (Lesson 2–3)

- A.** length = 24 inches
width = 1 inch
height = 2 inches
- B.** length = 6 inches
width = 6 inches
height = 4 inches
- C.** length = 16 inches
width = 16 inches
height = 16 inches
- D.** length = 12 inches
width = 2 inches
height = 2 inches

9	Extend the place value relationship to decimal numbers & Explain the relationship of place values in decimal numbers.	(1-6)	Page :69
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1. Which of the following statements is *true*?

- A.** 0.009 is ten times 0.09
- B.** 0.09 is ten times 0.009
- C.** 0.09 is $\frac{1}{10}$ of 0.009
- D.** 9 is $\frac{1}{10}$ of 0.9

2. Which of the following statements is *true*?

- A.** 0.003 is $\frac{1}{10}$ of 0.03
- B.** 0.03 is $\frac{1}{10}$ of 0.003
- C.** 0.3 is ten times 0.003
- D.** 3 is ten times 0.03

Marcella has \$5.00, Niko has \$0.50, and Benjamin has \$0.05. Use this information to complete each sentence.

- 3.** Benjamin has _____ the money Niko has.
- 4.** Marcella has _____ the money Niko has.

Complete each sentence.

- 5.** \$9.00 is _____ \$0.90.
- 6.** \$0.90 is _____ \$9.00.

9	Extend the place value relationship to decimal numbers & Explain the relationship of place values in decimal numbers.	13-15)	Page :87
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13. Which of the following statements is *true*? (Lesson 3-2)

- A.** 0.002 is 10 times 0.02
- B.** 0.02 is $\frac{1}{10}$ of 0.002
- C.** 0.02 is 10 times 0.002
- D.** 2 is $\frac{1}{10}$ of 0.2

14. Complete the sentence. (Lesson 3-2)

7 is _____ 0.7.

15. Complete the sentence. (Lesson 3-2)

0.05 is _____ 0.5.

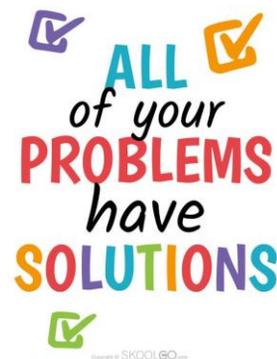
10	Use rounding strategies to round decimals.	(1-10)	Page :83
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What is each decimal rounded to the nearest whole number?
You can use a number line or place value.

- 1.** 78.39
- 2.** 4.07
- 3.** 12.7
- 4.** 15.55

What is each decimal rounded to the nearest tenth?
You can use a number line or place value.

- 5.** 42.89
- 6.** 3.65
- 7.** 16.12
- 8.** 98.17



9. Danica rounded a number to the nearest tenth to get 14.7. What number could she have rounded to get this answer?

10. Which statements are *true*?

- A. The decimal 43.678 rounded to the nearest tenth is 43.6.
- B. The decimal 43.678 rounded to the nearest tenth is 43.7.
- C. The decimal 43.678 rounded to the nearest hundredth is 43.68.
- D. The decimal 43.678 rounded to the nearest hundredth is 43.67.

11. The masses of five different dogs are shown. Round each mass to the nearest whole number.



12. **STEM Connection** The mass of the sun takes up about 99.86% of the mass of our solar system. What is 99.86 rounded to the nearest tenth?



13. Which of the following numbers are closer to 100? Which are closer to 99?

- 99.03 99.87 99.49 99.27 99.72

11	Estimate sums and differences of decimals.	(10-13)	Page :96
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10. The path around a lake is part stone and part dirt. About how long is the path around the lake?



11. Marcus's family is driving 354.3 miles to his grandmother's house. They have driven 209.7 miles. About how many more miles does Marcus's family have left to drive?
12. The winner of a skateboarding competition scored 87.83 points. The second-place skateboarder scored 81.50 points. About how many more points did the winner score than the second-place skateboarder?
13. Aaron has 1.3 meters of red yarn and 1.65 meters of purple yarn. Aaron says he has 2.95 meters of yarn. Is his answer reasonable? Explain.

11	Estimate sums and differences of decimals.	6	Page :128
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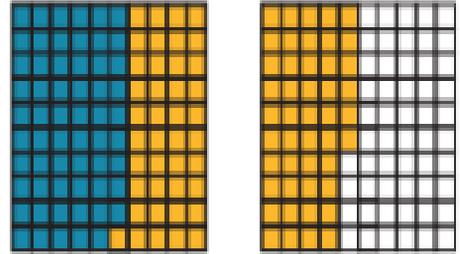
6. Wesley drove 81.23 miles before lunch and 49.49 miles after lunch.

Round each number to the nearest whole number to estimate of the total number of miles Wesley drove. (Lesson 4-1)

$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$

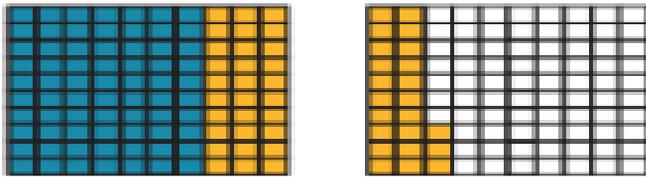
12	Represent addition of decimals using decimal grids & Represent addition of tenths and hundredths	11	Page :102
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11. Write the addition equation represented by the decimal grids.



12	Represent addition of decimals using decimal grids & Represent addition of tenths and hundredths	7	Page :128
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7. Look at the decimal grids.



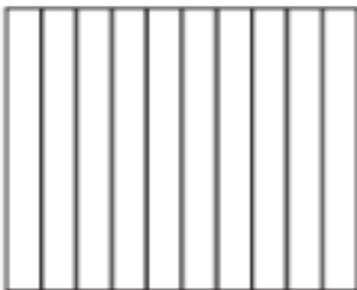
Complete the addition equation that is represented by the decimal grids. (Lesson 4-2)

$0.7 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

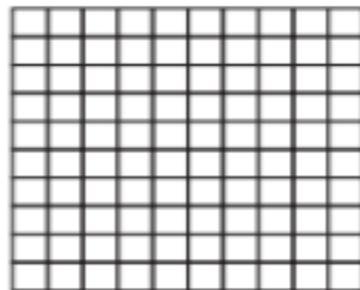
13	Represent subtraction of decimals less than 1 containing hundredths.	(2-4)	Page :113
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What is the difference? Use the decimal grid to solve.

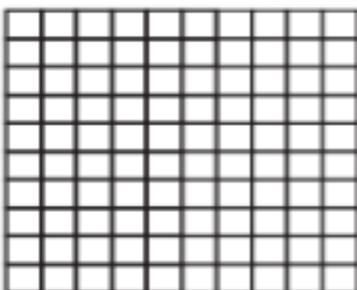
1. $0.7 - 0.1 = \underline{\hspace{2cm}}$



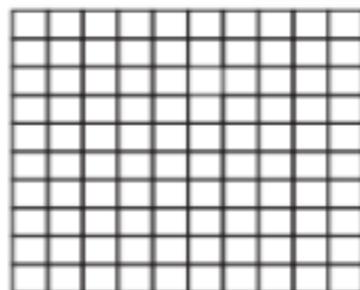
2. $0.09 - 0.02 = \underline{\hspace{2cm}}$



3. $0.54 - 0.38 = \underline{\hspace{2cm}}$

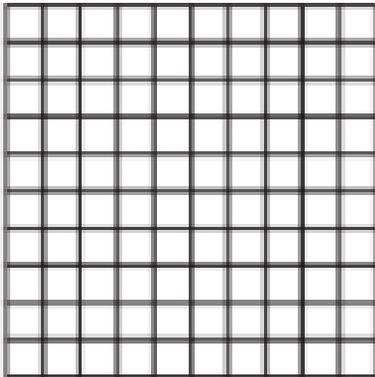


4. $0.25 - 0.11 = \underline{\hspace{2cm}}$



13	Represent subtraction of decimals less than 1 containing hundredths.	10	Page :128
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10. Use the decimal grid to solve $0.31 - 0.07 = d$. (Lesson 4-5)



What is the value of d ?

$d =$ _____

14	Write a power of 10 as a multiplication expression with factors of 10.	(1-4,13)	Page :137
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Write the exponential form as a multiplication expression.

1. 10^4

2. 10^2

3. 10^3

4. 10^5

13. Rachel finds the value of 10^5 as shown. Do you agree with her solution? Tell why.

$$10^5 = 10 \times 5 = 50$$

14	Write a power of 10 as a multiplication expression with factors of 10.	8	Page :166
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8. Which expression or value is equivalent to 10^4 ? (Lesson 5-1)

A. 1,000

C. $10 \times 10 \times 10 \times 10$

B. 10×4

D. $10 + 10 + 10 + 10$

15	Estimate products of multi-digit factors to determine if calculations are reasonable.	(1-4)	Page :145
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Estimate the product.

1. 643×18

2. 325×62

3. 438×27

4. 572×49

15	Estimate products of multi-digit factors to determine if calculations are reasonable.	15	Page :167
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15. Which equation represents the best estimate for 367×29 ?

(Lesson 5-3)

A. $300 \times 20 = 6,000$

B. $300 \times 30 = 9,000$

C. $400 \times 20 = 8,000$

D. $400 \times 30 = 12,000$

16	Multiply using an algorithm..	(1-4)	Page :157
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What is the product?

1.
$$\begin{array}{r} 327 \\ \times 6 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 543 \\ \times 8 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 1,931 \\ \times 5 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 3,462 \\ \times 4 \\ \hline \end{array}$$

17	Use patterns to multiply a decimal by a power of 10...	(1-4)	Page :175
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Write the multiplication expression using factors of 10. Then, find the value.

1. 3.6×10^2

2. 7.2×10^3

3. 4.8×10^4

4. 1.9×10^2

17	Use patterns to multiply a decimal by a power of 10...	(5,10)	Page :200
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5. Which is equivalent to 7.6×10^3 ?

(Lesson 6-1)

- A. 76
- B. 760
- C. 7,600
- D. 76,000

10. Which expressions are equivalent to 3,400? Choose all that apply.

(Lesson 6-1)

- A. 0.34×10^2
- B. 0.34×10^3
- C. 3.4×10^2
- D. 3.4×10^3
- E. 34×10^2
- F. 34×10^3



What is the product? Use patterns to solve.

4. $45 \times 17 = 765$

$45 \times 1.7 = \underline{\hspace{2cm}}$

$45 \times 0.17 = \underline{\hspace{2cm}}$

6. $16 \times 89 = 1,424$

$16 \times 8.9 = \underline{\hspace{2cm}}$

$16 \times 0.89 = \underline{\hspace{2cm}}$

8. $96 \times 55 = \underline{\hspace{2cm}}$

$96 \times 5.5 = \underline{\hspace{2cm}}$

$9.6 \times 5.5 = 52.8$

10. $67 \times 34 = \underline{\hspace{2cm}}$

$67 \times 3.4 = \underline{\hspace{2cm}}$

$6.7 \times 3.4 = \underline{\hspace{2cm}}$

5. $32 \times 14 = \underline{\hspace{2cm}}$

$32 \times 1.4 = 44.8$

$3.2 \times 1.4 = \underline{\hspace{2cm}}$

7. $61 \times 22 = \underline{\hspace{2cm}}$

$6.1 \times 22 = 134.2$

$6.1 \times 2.2 = \underline{\hspace{2cm}}$

9. $19 \times 42 = \underline{\hspace{2cm}}$

$1.9 \times 42 = 79.8$

$1.9 \times 4.2 = \underline{\hspace{2cm}}$

11. $82 \times 67 = \underline{\hspace{2cm}}$

$82 \times 6.7 = \underline{\hspace{2cm}}$

$8.2 \times 6.7 = \underline{\hspace{2cm}}$

7. Find the missing products.

(Lesson 6-5)

$23 \times 89 = \underline{\hspace{2cm}}$

$23 \times 8.9 = 204.7$

$2.3 \times 8.9 = \underline{\hspace{2cm}}$



19	Use patterns to determine the quotient when dividing by a multiple of 10..	(11-13)	Page : 210
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11. There are 24,000 quarters in rolls of 40 quarters each. How many rolls of quarters are there?

12. **Error Analysis** Drew wants to solve $12,000 \div 20$ by starting with this basic fact: $12 \div 2 = 6$. Drew then uses patterns to find a quotient of 60. Is Drew correct? If not, what mistake did he make?

13. **STEM Connection** A building has 20 floors. The building has a total floor area of 40,000 square feet. What is the area of each floor? Explain.



19	Use patterns to determine the quotient when dividing by a multiple of 10..	12	Page : 238
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12. There are 18,000 envelopes in packs of 60. How many packs of envelopes are there? (Lesson 7-1)

20	Use the relationship between multiplication and division to determine the quotient when dividing by a two-digit divisor	(5-8)	Page : 217
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Solve for the unknown.

5. $396 \div 12 = n$
 $n \times 12 = 396$

6. $448 \div 16 = s$
 $s \times 16 = 448$

7. $312 \div 52 = m$
 $m \times 52 = 312$

8. $533 \div 41 = a$
 $a \times 41 = 533$

20	Use the relationship between multiplication and division to determine the quotient when dividing by a two-digit divisor	7	Page : 238
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7. Write a multiplication equation you could use to solve $480 \div 12$.
 What is the solution?

(Lesson 7-3)



DREAM it
BELIEVE it
ACHIEVE it

