

الأسئلة الكتابية للهيكل الوزاري

Grade 3

الفصل الدراسي الأول

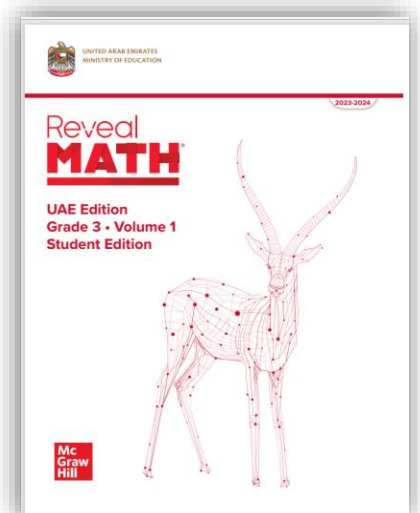
2025-2026

Math Teacher:

Farida Alhammadi



Good Luck!



School Principal :

Bakheeta Almansoori



21	(a,b) Represent 4-digit numbers in expanded form, word form, and standard form using an understanding of place value.	Learn+Work Together	34
22	Use partial sums to add 3-digit numbers.	Learn+Work Together	56
		(1-7) & (8-12)	57 & 58
23	a) Demonstrate an understanding of the Commutative Property of Multiplication.	(1-7) & (8-12)	103 & 104
	b) Use representations to determine the unknown in a multiplication or division equation.	(1-8)	119
24	Represent a problem with equal groups and an equation. Use equal groups to solve an equation.	Learn+Work Together	152
		(1-8) & (9-11)	153 & 154
25	(a,b) Represent a problem with arrays and an equation. Use arrays and properties of multiplication to solve an equation.	Learn+Work Together	190
		(1-12) & (13-15)	191 & 192

الأسئلة المقالية (الأسئلة
الكتابية) FRQ
5 أسئلة
الدرجة : (6-10) درجات

Learn

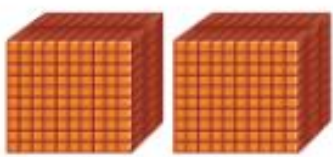
What are some ways to represent this number?



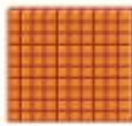
You can use a place-value chart.

thousands	hundreds	tens	ones
2	1	3	8

You can use base-ten blocks.



2 cubes
2,000



1 flat
100



3 rods
30



8 units
8

You can read and write the number in different forms.

- standard form** 2,138
- expanded form** $2,000 + 100 + 30 + 8$
- word form** two thousand, one hundred thirty-eight

Math is... Generalizations

How is representing 4-digit numbers the same as representing 3-digit numbers?

4-digit numbers have thousands, hundreds, tens, and ones.

Work Together

How can you represent 1,208 in expanded form and word form?

Learn

Maggie and Tanesha break apart the addends by place value to add $367 + 145$. They show their work in different ways.

How can each girl show their work in a different way?

hundreds	tens	ones
3	6	7
1	4	5

You can **decompose**, or break apart, the addends by place value to find partial sums. Then, add the partial sums to find the sum.

► **One Way** You can write the addends in a row.

$$367 + 145 = ?$$

$$300 + 100 = 400$$

$$60 + 40 = 100$$

$$7 + 5 = 12$$

$$400 + 100 + 12 = 512$$

► **Another Way** You can stack the addends.

	367	
	+ 145	
	400	
300 + 100	100	
60 + 40	12	
7 + 5	512	

One addition strategy is to find partial sums and add them to find the sum. You can write the addends in this strategy in different ways.

Math is... Explaining

Why is the sum the same when the addends are in a row or stacked?

Work Together

Ari's work is shown. Jun sees Ari's work and says 500 is the sum of $309 + 225$. Do you agree? Explain your reasoning.

	309
	+ 225
	500
300 + 200	20
0 + 20	14
9 + 5	534

How can you decompose each addend? What is the sum?

1. $247 + 564 = \underline{\hspace{2cm}}$

2.
$$\begin{array}{r} 815 \\ + 148 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 729 \\ + 148 \\ \hline \end{array}$$

4. $327 + 176 = \underline{\hspace{2cm}}$

5. Whitney uses partial sums to add. Look at her work to determine which two numbers were in her original equation.

$$\begin{array}{r} \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = 598 \\ 200 + 300 = 500 \\ 10 + 80 = 90 \\ 6 + 2 = 8 \\ 500 + 90 + 8 = 598 \end{array}$$

6. How can you determine which addends are in the original equation by looking at the partial products?

7. Tyrone spent 172 days in school last year. If he attends school the same number of days next year, how many days will he spend in school in two years?

How can you find the sums in a different way?

8. $475 + 325 = 800$
 $400 + 300 = 700$
 $70 + 20 = 90$
 $5 + 5 = 10$
 $700 + 90 + 10 = 800$

9. 238
 $+271$

 400
 100
 $+ 9$

 509

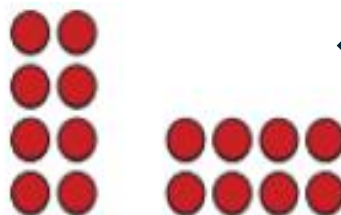
10. Eleanor's watch shows her steps before lunch. Then she took 486 more steps. How many total steps did she take?



11. **Error Analysis** Amal adds $378 + 141$. She decomposes each number and adds $300 + 100 = 400$. She writes $378 + 141 = 400$. How can you explain her mistake?

12. **Extend Your Thinking** How can you solve $249 + 401 + 276$ using partial sums? Show your work.

1. What two multiplication equations represent these arrays?



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2. Sam says that 6×2 and 2×6 have the same product. Do you agree with Sam? Explain why or why not.

What makes the equation true? Fill in the blank.

3. $5 \times 6 = 6 \times$ _____

4. $9 \times 0 =$ _____ $\times 9$

5. Use representations to show 2×3 is equal to 3×2 .

6. Use representations to show 1×4 is equal to 4×1 .

7. **STEM Connection** Finn's construction team just finished placing windows in the building. What two multiplication equations can represent the total number of windows in the front of the building?



23	a) Demonstrate an understanding of the Commutative Property of Multiplication.	(1-7) & (8-12)	103 & 104
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8. How can you explain whether this statement is true or false?

$$7 \times 2 = 14, \text{ so } 14 \times 2 = 7.$$

9. How does knowing the product of 9×6 help you find the product of 6×9 ?

10. Use 3, 30, and 10 to write 2 true multiplication equations.

11. Oliver has 3 sheets of stickers with 4 stickers on each sheet. Sara has 4 sheets of stickers with 3 stickers on each sheet. Who has more stickers? Explain.

12. **Extend Your Thinking** Explain how this array represents 9×3 and 3×9 .



Use the representation. What is the unknown?

1. $4 \times \underline{\hspace{2cm}} = 12$



2. $\underline{\hspace{2cm}} \times 7 = 21$



3. Robert has 16 pencils. He puts an equal number of pencils in 2 boxes. How many pencils does he put in each box?



$16 \div 2 = \underline{\hspace{2cm}}$

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

How can you draw a representation to find the unknown?

4. $4 \div 2 = \underline{\hspace{2cm}}$

5. $6 \times \underline{\hspace{2cm}} = 18$

6. $18 \div 2 = \underline{\hspace{2cm}}$

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

8. Lauren and Miguel make 20 paper snowflakes. If they make the same number of snowflakes, how many do Lauren and Miguel each make?

Learn

There are 20 children in 5 equal groups on the sky ride.

How many children are in each group?

► **One Way** Use multiplication to represent the problem.

$$5 \times ? = 20$$



$$5 \times 4 = 20$$

► **Another Way** Use division to represent the problem.

$$20 \div 5 = ?$$



$$20 \div 5 = 4$$

There are 4 children in each group.

You can use a multiplication equation or a division equation to represent and solve problems involving equal groups.

Math is... Patterns

How can you use multiplication patterns to check that your solution is correct?

Work Together

Ten more children join the group. How can you find the number of children in each of the five carts on the sky ride if there are the same number of children in each cart?

24	Represent a problem with equal groups and an equation. Use equal groups to solve an equation.	Learn+Work Together (1-8) & (9-11)	152 153 & 154
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How can you write a multiplication and division equation for the problem? Write a ? for the unknown.

1. Eight friends share 40 apple slices. If each friend receives the same amount of apple slices, how many does each person receive?
2. Bobbie, Wendy, and Winston spent a total of \$21 to go to the movies. If it cost each person the same amount, how much did each person spend?
3. Jermaine ran 56 minutes over seven days. If he ran the same amount of time each day, how many minutes did he run each day?
4. June earns \$25 for working five hours. If she earns the same amount each hour, how much does she get paid per hour?

How can you draw a representation for the set of equations?

5. $6 \times ? = 18$
 $18 \div 6 = ?$
6. $8 \times ? = 24$
 $24 \div 8 = ?$
7. $9 \times ? = 36$
 $36 \div 9 = ?$
8. $3 \times ? = 21$
 $21 \div 3 = ?$

24	Represent a problem with equal groups and an equation. Use equal groups to solve an equation.	Learn+Work Together	152
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9. Sam bought tickets to the county fair. How much did each ticket cost if each costs the same amount?

10. Carlos spends 35 minutes on homework. He spends the same amount of time on each of his 5 assignments. How long does he spend on each assignment?



11. **STEM Connection** It takes Grace 24 hours to write a computer program for 4 robots. If each program takes the same amount of time to write, how long does it take Grace to write one program? Explain.

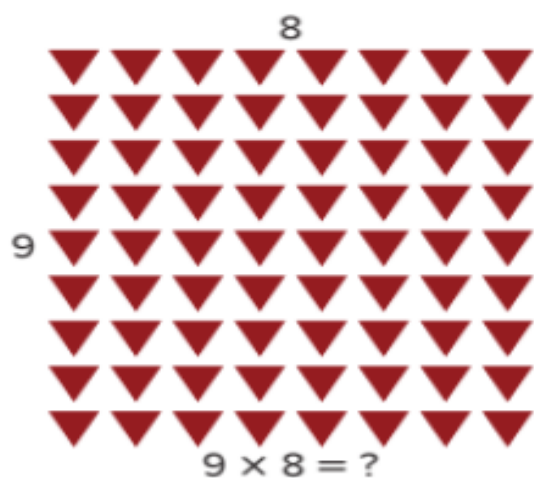


Learn

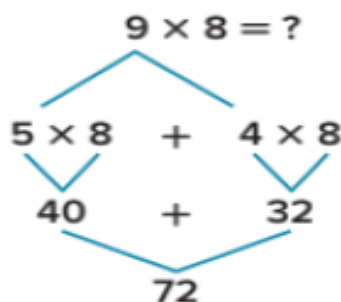
Kyla needs to add 8 flags to each of 9 swimming pool lanes for an upcoming meet.

How many flags does she need in total?

Draw an array and write an equation to represent the unknown in the problem.



Decompose a factor to help you find the product.



$$9 \times 8 = 72$$

Kyla needs 72 flags.

You can represent a multiplication problem with an array and equation.

You can decompose a factor to help you solve the problem.

Math is... Structure

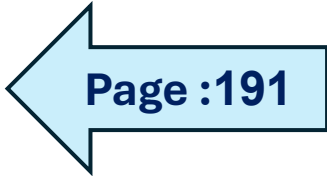
How could you decompose 8, instead of 9, to solve the problem?

Work Together

An artist places 7 clay bowls on each of 6 shelves in a display case. How can you decompose a factor to find the number of bowls the artist displays?

How can you draw an array and decompose a factor to show your work?

1. A box of soup cans is arranged in 8 rows with 6 cans in each row. How many cans of soup are in the box?
2. The cafeteria has 6 tables and 4 seats at each table. How many seats are in the cafeteria?



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What completes the equation?

3. $8 \times 5 = \underline{\hspace{2cm}}$

4. $\underline{\hspace{2cm}} = 7 \times 6$

5. $6 \times \underline{\hspace{2cm}} = 54$

6. $3 \times 7 = \underline{\hspace{2cm}}$

7. $9 \times 3 = \underline{\hspace{2cm}}$

8. $4 \times \underline{\hspace{2cm}} = 36$

9. $\underline{\hspace{2cm}} \times 8 = 56$

10. $72 = \underline{\hspace{2cm}} \times 8$

11. $\underline{\hspace{2cm}} = 4 \times 8$

12. $4 \times 7 = \underline{\hspace{2cm}}$

13. STEM Connection Finn is drawing a picture of a hotel. The first floor has 9 hallways with 9 doors in each hallway. The second floor has 9 hallways with some doors in each hall.



- a. How many doors are on the first floor?
- b. How many doors are on the second floor if there are 6 doors in each hallway?

14. Sawyer wants to find 7×9 . She starts by drawing an array. Number her next steps in the correct order to find the product.

- _____ She finds the products 7×4 and 7×5 .
- _____ She finds the product of $7 \times 9 = 63$.
- _____ She decomposes the factor 9 into 4 and 5.
- _____ She adds 28 and 35.

15. Extend Your Thinking Braxton lost his homework assignment, but he still has his answer sheet. For one of the problems, he drew an array with one factor decomposed into 5 and 2. What might have been the problem? Explain.