

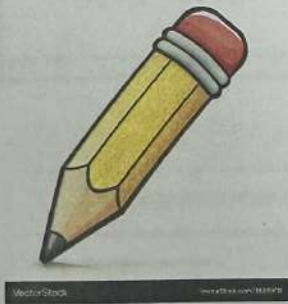


EoT_T1_Coverage_Grade 3

هيكل مادة الرياضيات للصف الثالث الفصل الدراسي الأول

Math Teacher:

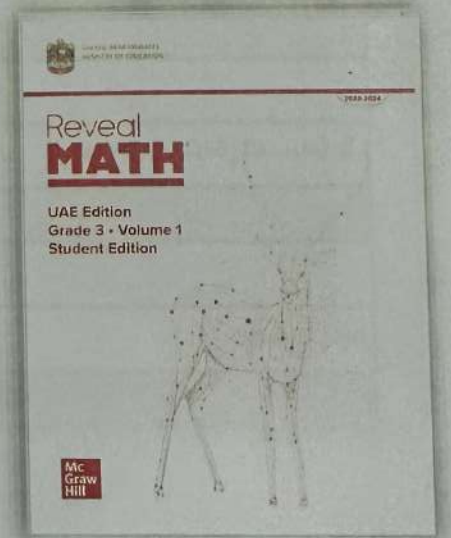
Farida Alhammadi



Good Luck!

School Principal :

Bakheeta Almansoori





Academic Year	2024/2025
السنة الدراسية	
Term	1
الفصل	
Subject	Mathematics/Reveal
المادة	الرياضيات/يُفعل
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	(6-13)
الدرجات للأسئلة المقالية	
Type of All Questions	MCQ/ الأسئلة الموضوعية
نوع كافة الأسئلة	FRQ/ الأسئلة المقالية
Maximum Overall Grade	100
الدرجة القصوى الممكنة	
Exam Duration	150 minutes
مدة الامتحان	
Mode of Implementation	Paper-Based
ريقة التطبيق	
Calculator	Not Allowed
الآلة الحاسبة	غير مسموحة

*	Questions might appear in a different order in the actual exam, or on the exam paper.
*	قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان.
**	As it appears in the textbook, and LMS.
**	كما وردت في كتاب الطالب و LMS.

School principal
Bakheeta Almansoori

Farida Alhammadi
Farida Alhammadi

Math Teacher
Farida Alhammadi



Question سؤال	Lesson Name اسم الدرس	Reference(s) to the Student Book (English Version) المرجع في كتاب الطالب (الطبعة الانجليزية)	
		Example/Question مثال/سؤال	Page الصفحة
1	Round Multi-Digit Numbers	(2-8)	33
		7	34
2	Use Addition Properties to Add	(2-6)	43
		8,9	34
3	Use Partial Sums to Add	(2-7)	57
		(8-12)	58
4	Decompose to Subtract	(2-8)	61
		(9-12)	62
5	Adjust Numbers to Add or Subtract	(9-12)	66
		13	65
6	Solve Two-Step Problems Involving Addition and Subtraction	(2-7)	81
		19	83
7	Understand Equal Groups	(1-9)	93
		7	122
8	Use Arrays to Multiply	(1-6)	97
		10	122
9	Understand the Commutative Property	(2-7)	103
		(8-12)	104
10	Understand Equal Sharing	(9-12)	108
		12	122
11	Use Patterns to Multiply by 2	(2-10)	131
		(11-14)	132
12	Use Patterns to Multiply by 5	(2-11)	135
		(12-15)	136
13	Use Patterns to Multiply by 1 and 0	(2-11)	145
		(12-14)	146
14	Understand the Distributive Property	(2-6)	165
		(7-12)	166
15	Use Properties to Multiply by 4	(2-8)	173
		(9-12)	174

الأسئلة الموضوعية
(الاختيار من متعدد) MCQ

15 سؤال

كل سؤال 4 درجات

School principal
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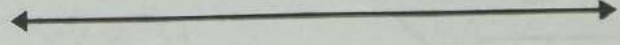
Use a number line to round.

1. Round 27 to the nearest 10.

30

2. Round 896 to the nearest 10.

900



Use place value to round.

3. Round 48 to the nearest 10.

50

4. Round 273 to the nearest 10.

270

Use a number line to round. Show your work.

5. Round 436 to the nearest 100.

400

6. Round 672 to the nearest 100.

700

436 rounded to the nearest 100

is 400.

672 rounded to the nearest 100

is 700.

7. How can the number 78 round to 80 and 100? Explain.

Round 10 $\rightarrow 78 \Rightarrow 80$

Round 100 $\rightarrow 078 \Rightarrow 100$

8. A number rounded to the nearest 10 is 240. What number could it be?

241 , 242, 243, 244
235 , 236 , 237
238, 239

Page :39

Example A number rounded to nearest 10 is 260

✓ (a) 256 = 260 ✓
X (b) 268 = 270 X
X (c) 269 = 270 X

7. Circle the choice that correctly shows rounding to the nearest

10. (Lesson 2-2)

780 784 → ~~785~~

560 563 → 560 ✓

490 492 → ~~500~~

40 535 → ~~530~~

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*خوب کل امتحان

How can you make the equation true?

1. $218 + 325 = 325 + \underline{218}$

2. $465 + \underline{78} = 78 + 465$

3. $529 + 407 = \underline{407} + 529$

4. $\underline{505} + 93 = 93 + 505$

5. Mauricio had a sale. The table shows the number of items he sold each day. Which expressions show how to find the total + number of items Mauricio sold? Choose all that apply.

A. $\underline{42 + 67 + 58}$ ✓

~~B. $67 - 58 + 42$~~

C. $\underline{58 + 42 + 67}$ ✓

~~D. $58 + 67 + 24$~~

Items Sold	
Monday	<u>58</u>
Tuesday	<u>67</u>
Wednesday	<u>42</u>

6. How can you group the addends to make it easier find the sum? Explain your thinking.

①
 $\begin{array}{r} 372 \\ + 264 \\ \hline 636 \end{array}$

$\underline{372 + 264} + 228$

$636 + 228 = 864$

①
 $\begin{array}{r} 636 \\ + 228 \\ \hline 864 \end{array}$

Complete the following using properties of addition. (Lesson 2-4)

8. $289 + 621 = 621 + \underline{289}$

9. $78 + \underline{418} + 212 = \underline{418} + 212 + 78$

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

1. $247 + 564$

Decomposition: $200 + 500 = 700$
 $40 + 60 = 100$
 $7 + 4 = 11$

Sum: 811

2. $815 + 148$

Sum: 963

3. 729

$+148$

Sum: 877

4. $327 + 176$

Decomposition: $300 + 100 = 400$
 $20 + 70 = 90$
 $7 + 6 = 13$

Sum: 503

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

$216 + 382 = 598$

Partial sums: $200 + 300 = 500$
 $10 + 80 = 90$
 $6 + 2 = 8$

Sum: $500 + 90 + 8 = 598$

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

The numbers in partial sum equation represent the parts of the two addends.

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?

$172 + 172$

Sum: 344

How can you find the sums in a different way?

8. $475 + 325 = 800$

$400 + 300 = 700$

$70 + 20 = 90$

$5 + 5 = 10$

$700 + 90 + 10 = 800$ ✓

$$\begin{array}{r} 475 \\ + 325 \\ \hline 800 \end{array}$$

9. 238

$+ 271$

400

100

$+ 9$

509 ✓

$$\begin{array}{r} 200 \\ 30 \\ 8 \end{array} \begin{array}{l} \nearrow \\ \nearrow \\ \nearrow \end{array} 238 + 271 \begin{array}{l} \nwarrow \\ \nwarrow \\ \nwarrow \end{array} \begin{array}{r} 200 \\ 70 \\ 1 \end{array}$$

$200 + 200 = 400$

$30 + 70 = 100$

$8 + 1 = 9$

509 ✓

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

$$\begin{array}{r} 486 \\ + 467 \\ \hline 953 \end{array}$$

$486 + 467 = 953$



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?

$300 + 100 = 400$
 $70 + 40 = 110$
 $8 + 1 = 9$
 519

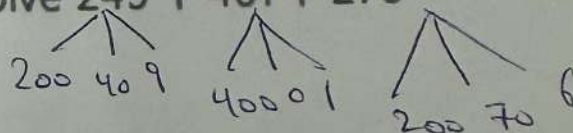
No, she do it only one step don't complete it the other partial sums.

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

$200 + 400 + 200 = 800$

$40 + 70 = 110$

$9 + 1 + 6 = 16$



How can you decompose the number in 2 ways?

1. 367

$$300 + 60 + 7$$

$$350 + 10 + 7$$

2. 876

$$800 + 70 + 6$$

$$850 + 20 + 6$$

How can you decompose one number to subtract? Why did you choose that way?

3. $495 - 122$

$$495 - 100 = 395$$

$$395 - 20 = 375$$

$$375 - 2 = 373$$

4. $639 - 370$

$$639 - 300 = 339$$

$$339 - 70 = 269$$

How can you find the difference? Show the strategy you used.

5. $284 - 182 =$

$$\begin{array}{r} 284 \\ - 182 \\ \hline 102 \end{array}$$

$$\begin{array}{r} \text{لٲاكر} \\ 102 \\ + 182 \\ \hline 284 \end{array}$$

6. $= 333 - 114$

$$\begin{array}{r} 333 \\ - 114 \\ \hline 219 \end{array}$$

$$\begin{array}{r} \text{لٲاكر} \\ 219 \\ + 114 \\ \hline 333 \end{array}$$

7. $502 - 382 =$

$$\begin{array}{r} 502 \\ - 382 \\ \hline 120 \end{array}$$

$$\begin{array}{r} \text{لٲاكر} \\ 120 \\ + 382 \\ \hline 502 \end{array}$$

8. $744 - 466 =$

$$\begin{array}{r} 744 \\ - 466 \\ \hline 278 \end{array}$$

$$\begin{array}{r} \text{لٲاكر} \\ 278 \\ + 466 \\ \hline 744 \end{array}$$

Error Analysis Juan subtracts $345 - 101$. He decomposes 101 into 100 and 10 and subtracts the parts from 345. How can you help him understand his mistake?

No, 101 decompose to
 $101 = 100 + 1$

10. The table shows the number of people who attended the school fun fair each day. Show a strategy to find the difference between the greatest and least number of people.

Fun Fair Visitors	
Day	Number of People
Thursday	103
Friday	168
Saturday	257
Sunday	224

الأكبر

$$\begin{array}{r} 257 \\ - 103 \\ \hline 154 \end{array}$$

11. A baker bakes 268 bread rolls. 155 are cinnamon rolls. The rest are plain rolls. How many plain rolls does she bake?

$$\begin{array}{r} 268 \\ - 155 \\ \hline 113 \end{array}$$

12. **Extend Your Thinking** Ana subtracts $438 - 342$ by decomposing 342. She subtracts 2, then 300, and finally 40. Can she subtract the parts in any order?

Explain your reasoning.

Yes, the order does not matter if all parts of 342 subtract from 438

You can adjust $236 - 119$ different ways. How can you explain one way you can adjust and why the equation is easier?

في الـ $-$
minus
لا يتغير
same
إما $+$ $+$ أو $-$ $-$

$$\begin{array}{r} 236 - 119 \\ \boxed{+1} \quad \boxed{+1} \\ \hline 237 - 120 = 117 \end{array}$$

في المرح دائماً
لأنتج أفضل
آخر رقم للمصفر

10. Melissa and Juan are finding $129 + 257$ by adjusting. Melissa tries solving using $130 + 258 = 388$ and Juan solves it using $130 + 256 = 386$. Which sum is correct? Explain.

Juan because she subtract one and add other

$$\begin{array}{r} 129 + 257 \\ \boxed{+1} \quad \boxed{-1} \\ \hline = 130 + 256 \\ = 386 \end{array}$$

11. **STEM Connection** Saffron completed 851 orders of pastries her first year. After her second year, she completed 926 orders. How many more pastry orders did she complete in her second year than in her first year?

$$\begin{array}{r} 926 - 851 \\ \boxed{-1} \quad \boxed{-1} \\ \hline 8925 - 850 = 075 \end{array}$$



12. **Extend Your Thinking** Yazmin adds $457 + 251$. She adjusts 251 to 250, but forgets to adjust 457. She adds $457 + 250 = 707$. How can she adjust the sum to fix her mistake? Explain your reasoning.

because she subtract 1 from 251, she must to add 1 to 457 to find the correct

$$\begin{array}{r} 457 + 251 \\ \boxed{+1} \quad \boxed{-1} \\ \hline 456 + 250 = 706 \end{array}$$

Gabe is trying to solve $246 + 367$. Which equation shows how he could adjust the addends to find the sum?

(Lesson 2-8)

~~A.~~ $250 + 360 = ?$

~~B.~~ $250 + 370 = ?$

C. $250 + 363 = ?$

D. $250 + 371 = ?$

أَسْئَلُهُ أَجْزَأَ
نَحْنُ الْخِيَارَاتِ
حَتَّى نَوْجَاهُ
زُودَ أَوْفَقَ

Represent and solve the problem. Use letters for the unknowns.

5. Sam and Ben take turns driving. They traveled 417 miles in May and 454 miles in June. If Sam drove 502 of the miles, how many miles did Ben drive?

① $454 + 417 = 871$

② $871 - 502 = 369$

6. Jaya earned \$187 babysitting. She bought a wireless speaker for \$129 and a carrying case for \$26. How much money does she have left?

① $187 - 129 = 58$

② $58 - 26 = 32$

7. Judy has 323 beads. Sarah has 142 more beads than Judy. How many beads do they have together?

① $323 + 142 = 465$

② $465 + 323 = 788$

Enrique read 249 pages of his book in June and 227 pages of his book in July. The book has a total of 638 pages and Enrique wants to know how many pages he has left $(-)$ to read. (Lesson 2-12)

Which set of equations could be used to solve the problem?

~~A.~~ $227 + 249 = 476$

$638 - 227 = 411$

B. $249 + 277 = 476$

$638 - 476 = 162$

~~C.~~ $638 - 249 = 389$

$389 + 227 = 616$

~~D.~~ $638 - 227 = 411$

$411 + 249 = 660$

① +
② -

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7

Understand Equal Groups

(\times) multiply

(1-9)

93

7

122

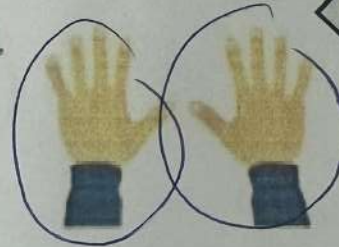
How many? Fill in the blanks.

1.



$3 \times 4 = 12$

2.



$2 \times 5 = 10$

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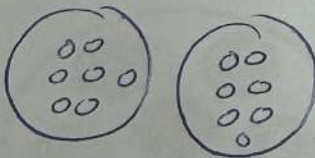
2 equal groups of 5

3 equal groups of 4

How can you represent the equal groups?

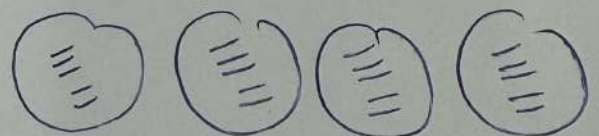
3. 2 equal groups of 7

$2 \times 7 = 14$



4. 4 equal groups of 5

$4 \times 5 = 20$



How many objects?

4 equal groups of 4 pencils

$4 \times 4 = 16$

16 pencils

6. 3 equal groups of 2 mittens

$3 \times 2 = 6$

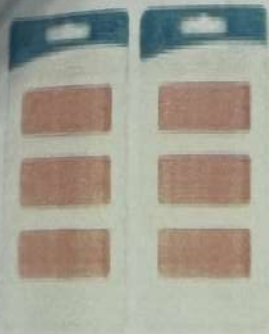
6 mittens

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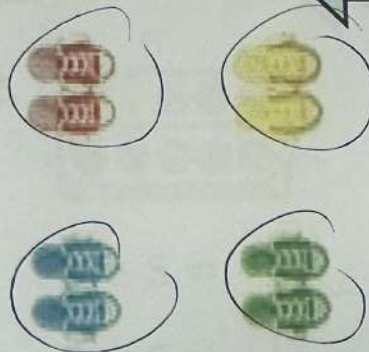
equation represents the equal groups?

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$$2 \times 3 = 6$$

8.



$$4 \times 2 = 8$$

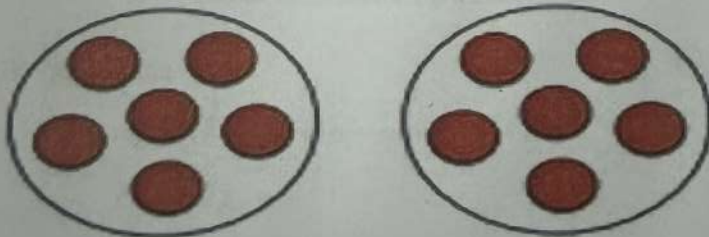
9. **STEM Connection** Finn has 3 construction sites. He assigns 8 workers to each site. How many workers does he assign? Explain how you know.

$$3 \times 8 = 24$$



7. How can you represent these groups of counters? (Lesson 3-1)

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$$2 \times 6 = 12$$

How many? Complete the equations.

1.



$$4 + 4 + 4 = 12$$

$$3 \times 4 = 12$$

2.

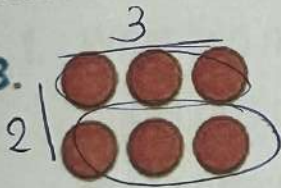


$$5 + 5 = 10$$

$$2 \times 5 = 10$$

Write one addition equation. Write one multiplication equation.

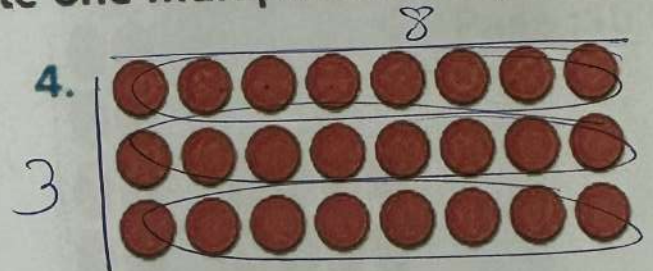
3.



$$2 \times 3 = 6$$

$$3 + 3 = 6$$

4.

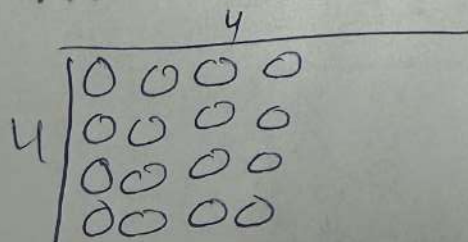


$$3 \times 8 = 24$$

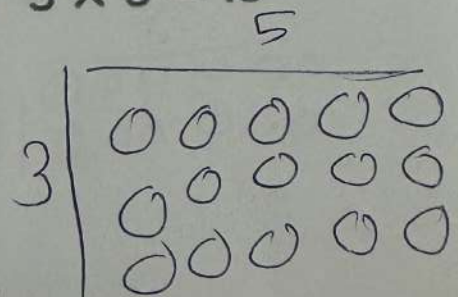
$$8 + 8 + 8 = 24$$

How can you draw an array to represent the equation?

5. $4 \times 4 = 16$

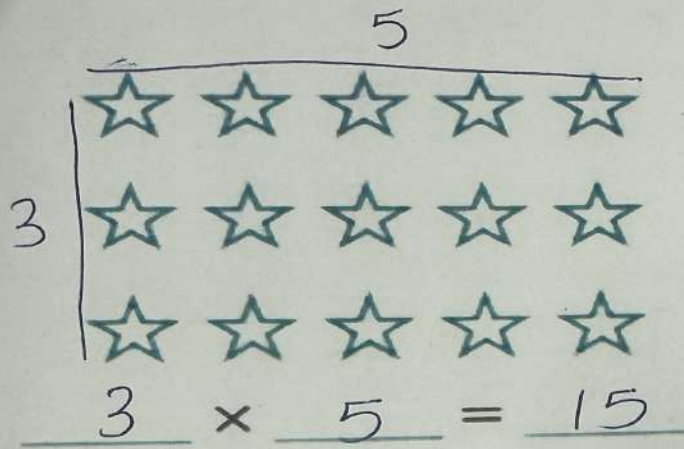


6. $3 \times 5 = 15$



What equation represents the stars shown? (Lesson 3-2)

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9

Understand the Commutative Property

Commutative

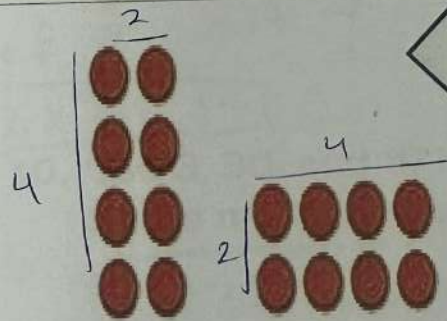
(1-7)

103

(8-12)

104

1. What two multiplication equations represent these arrays?

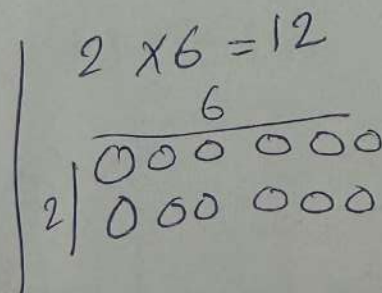
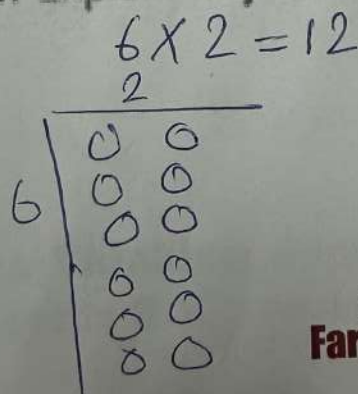


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$4 \times 2 = 8$ $2 \times 4 = 8$

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

Yes



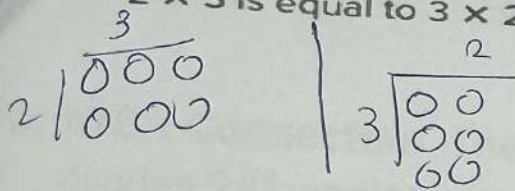
What makes the equation true? Fill in the blank.

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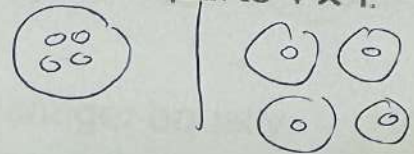
3. $5 \times 6 = 6 \times \underline{5}$

4. $9 \times 0 = \underline{0} \times 9$

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



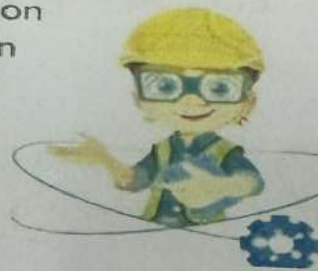
6. Use representations to show 1×4 is equal to 4×1 .



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?

$4 \times 5 = 20$

$5 \times 4 = 20$



8. How can you explain whether this statement is true or false?

$7 \times 2 = 14$, so $14 \times 2 = 7$.

False

14 groups of 2 not 7

$7 \times 2 = 14$

$2 \times 7 = 14$

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

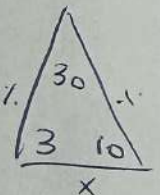
$9 \times 6 = 54$

$6 \times 9 = 54$

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

$3 \times 10 = 30$

$10 \times 3 = 30$



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.

$3 \times 4 = 12$

$4 \times 3 = 12$

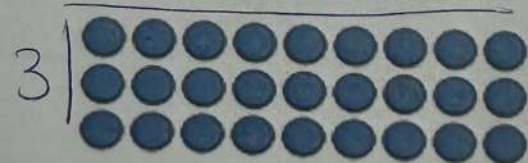
both, same numbers (commutative)

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

$9 \times 3 = 27$

$3 \times 9 = 27$

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divide \div

(9-12)

108

12

122

representation and write an equation for each situation.

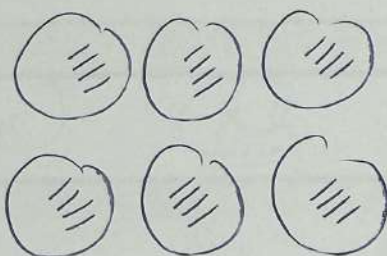
There are 25 crackers to be shared equally among 5 bowls.

$$25 \div 5 = 5$$



10. STEM Connection The construction manager equally divides 24 bundles of lumber among 6 carpenters.

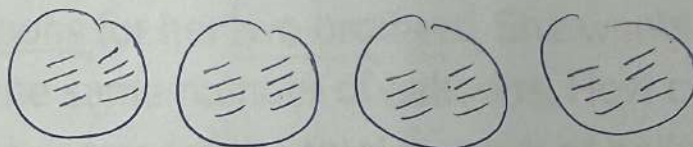
$$24 \div 6 = 4$$



11. Emma picks 32 peaches. She needs 8 peaches for each batch of jam. If she makes 4 batches, will she have any peaches left over? Justify your answer.

No
Zero

$$32 \div 4 = 8$$



12. Extend Your Thinking Ms. Bain has 3 art tables. She shares 27 markers equally among the tables so each student gets 3 markers. How many students sit at each table? Explain how you know.

$$27 \div 3 = 9$$

If each student get 3 markers.

$$\text{then: } 9 \div 3 = 3$$

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Clara has 20 glue bottles to place at 5 tables. She will place the same number of bottles on each table.

Which equation represents the problem? (Lesson 3-4)

~~A.~~ $5 \div 4 = 20$

~~B.~~ $5 \div 20 = 4$

~~C.~~ $4 \div 5 = 20$

D. $20 \div 5 = 4$

المسألة دائماً تبدأ
بأرسل

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11	Use Patterns to Multiply by 2	$\times 2$	multiply by 2	(1-10)	131
				(11-14)	132

1. Byron is making loaves of bread. He uses 2 cups of flour for each loaf. Complete the table to show how many cups of flour he needs for each number of loaves.

Loaves of Bread	Cups of Flour
5	10
6	12
7	14

2. Arya is buying balloons for her two brothers. She wants to give them both the same number of balloons. How can you write an equation to represent the total number of balloons Arya might buy?

2 X numbers of balloons.

example $2 \times 9 = 18$

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3. Peter is cooking potatoes in a large pot. The recipe calls for 2 minutes of boiling for every pound of potatoes. How many minutes will it take Peter to cook 8 pounds of potatoes?

$2 \times 8 = 16$

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Draw a line to connect the related equations.

$2 \times ? = 4$ $7 + 7 = ?$ 14
 $2 \times ? = 10$ $2 + 2 = ?$ 4
 $2 \times ? = 14$ $5 + 5 = ?$ 10

Page :131

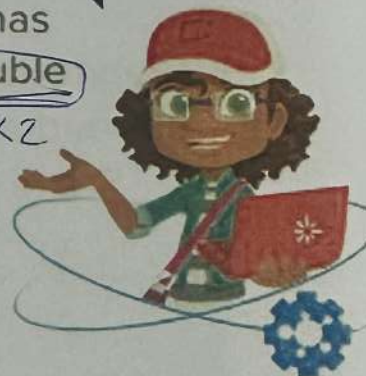
How can you complete the equation?

5. $2 \times 9 =$ 18 6. 20 = 2×10
 7. $6 \times 2 =$ 12 8. $8 =$ 4 $\times 2$
 9. 3 $\times 2 = 6$ 10. $7 \times 2 =$ 14

Page :132

11. STEM Connection Matthew's computer program has 6 lines of code. Grace's computer program has double the number of lines of code as Matthew's. How many lines of code does Grace's program have?

$\times 2$ \leftarrow double تنبيه لـ 2
 $6 \times 2 = 12$



12. Jenine has 7 pencils. Karly has double the number of pencils Jenine has. How many pencils does Karly have?

$7 \times 2 = 14$

13. Choose the equations that are true.

A. $2 \times 5 = 5 + 5$

B. $2 \times 3 = 2 + 3$

C. $2 \times 6 = 6 + 2$

D. $2 \times 4 = 4 + 4$

14. Extend Your Thinking Sarah has 4 blocks. Frank has double that number of blocks. Zehra has double Frank's number of blocks. How can you find the number of blocks Zehra has?

Zehra
 2×8
 $= 16$

Farida Alhammadi

Frank
 $2 \times 4 = 8$

can you use what you know about multiplication with to answer the question?

Page : 135

1. What can you say about the products of $\times 5$ facts?

multiples of 5 has 0 or 5
in the ones
one odd, one even

2. Sheila says that knowing 3×5 can help you remember 5×3 .

Is she correct? Explain.

$$3 \times 5 = 15$$

$$5 \times 3 = 15$$

same answer
commutative

change order of
factors doesn't
change the product

3. Marcel is decorating a poster with stickers. He arranges the stickers into 5 rows. Each row has the same number of stickers. How many stickers might Marcel have in all?

5, 10, 15, 20, 25, 30, 35, 40, ...

How can you complete the equation?

4. $5 \times 9 = \underline{45}$

5. $\underline{35} = 5 \times 7$

6. $6 \times 5 = \underline{30}$

7. $25 = 5 \times \underline{5}$

8. $10 \times 5 = \underline{50}$

9. $3 \times 5 = \underline{15}$

10. $\underline{2} \times 5 = 10$

11. $8 \times 5 = \underline{40}$

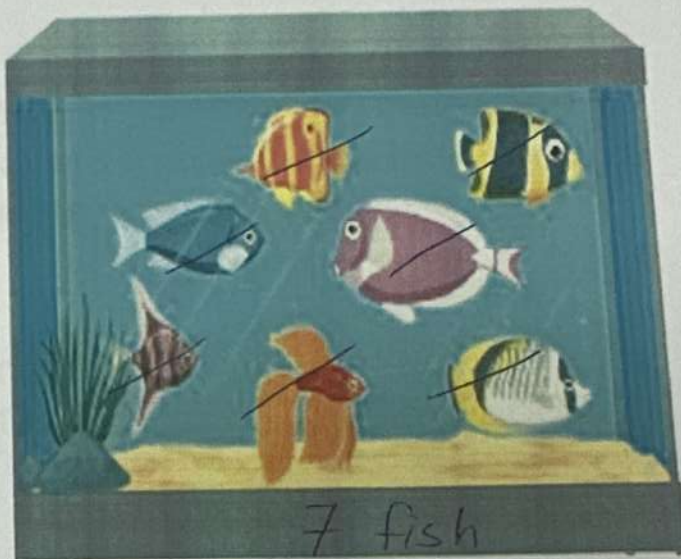
Mary Lou does 5 jumping jacks. If she does the same number of jumping jacks for 4 days in a row, how many jumping jacks does Mary Lou do?

$$5 \times 4 = 20$$

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13. Sara puts the same number of fish shown in each of 5 tanks. How many fish does she have?

$$5 \times 7 = 35$$



14. Which equations are true? Choose all that apply.

~~A.~~ $5 \times 3 = 3 + 3 + 3$

B. $3 \times 5 = 5 + 5 + 5$

~~C.~~ $5 \times 2 = 5 + 2$

D. $5 \times 4 = 4 + 4 + 4 + 4$

15. **Extend Your Thinking** Lee has 32 books. He says he can make 5 stacks of books with the same number of books in each stack. Is he correct? Explain.

No. $32 \div 5 = X$

32 not product of 5

does not have 2 or 5 in ones

can you complete the equation?

1. $7 \times 1 = 7$

2. $0 = 0 \times 1$

3. $4 \times 0 = 0$

4. $1 \times 1 = 1$

5. $0 \times 6 = 0$

6. $8 = 1 \times 8$

7. Kelly and Yusif want to share a box of crackers. They open the box and share all of the crackers in the box. They each get 0 crackers. How many crackers were in the box?

$2 \times 0 = 0$

8. Eli checks out some books from the library. He reads 1 book per day. How many days will it take Eli to read all his books?

$1 \times 1 = 1$

$1 \times 2 = 2$

$1 \times 3 = 3$

$1 \times 4 = 4$

:

$1 \times 8 = 8$

9. Carter starts playing a new game. He completes 0 levels per day for a week. How many levels will Carter complete by the end of the week? week = 7 days.

$0 \times 7 = 0$

10. Mr. Mustafa buys 1 jersey for each player on his daughter's team. There are 9 players. How can you write an equation to find the number of jerseys he buys?

$9 \times 1 = 9$

11. There are 3 bins. Each bin has 1 book. How can you write an equation to show the number of books there are?

$3 \times 1 = 3$

Which equations are true? Circle all that are correct.

~~A.~~ $6 \times 0 = 6$

B. $8 \times 1 = 2 \times 4$

C. $0 \times 3 = 9 \times 0$

~~D.~~ $1 \times 10 = 5 \times 1$

13. Error Analysis Elijah says that multiplying 4 by 0 is like adding 0 to 4. His work is shown. Do you agree? Explain. No

$4 + 0 = 4$

but $4 \times 0 = 0$

$4 + 0 = 4$

$4 \times 0 = 4$

multiply any number by zero always zero

14. Extend Your Thinking Does the equation $1 \times 0 = ?$ follow the pattern of multiples of 0, multiples of 1, or both? Justify your reasoning. Both

product of zero always 0

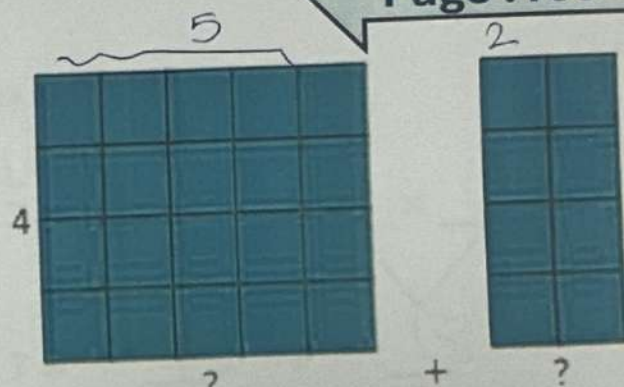
product of 1 same number

How can you use the representation to decompose 4×7 ?

$$4 \times 7 = 4 \times 5 + 4 \times 2$$

$$4 \times 7 = 20 + 8$$

$$4 \times 7 = 28$$



2. How can you decompose 9×6 ?

$$9 \times 6 = 5 \times 6 + 4 \times 6$$

$$9 \times 6 = 30 + 24$$

$$9 \times 6 = 54$$

What number makes the equation true?

$$3 \times ? \times 7 = 3 \times 7 + 3 \times 7$$

$$? = 6$$

$$4 \times ? = 5 \times 8 + 2 \times 8$$

$$? = 8$$

$$5. 1 \times 9 + 5 \times 9 = 9 \times ?$$

$$6 = ?$$

$$6. 6 \times 2 + 6 \times 2 = 6 \times ?$$

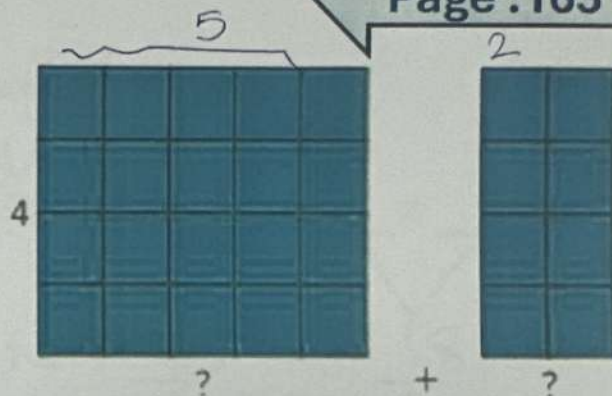
$$4 = ?$$

1. How can you use the representation to decompose 4×7 ?

$$4 \times 7 = 4 \times \underline{5} + 4 \times \underline{2}$$

$$4 \times 7 = \underline{20} + \underline{8}$$

$$4 \times 7 = \underline{28}$$



2. How can you decompose 9×6 ?

$$\begin{matrix} 5 \\ 4 \end{matrix} > 9 \times 6 = \underline{5} \times \underline{6} + \underline{4} \times \underline{6}$$

$$9 \times 6 = \underline{30} + \underline{24}$$

$$9 \times 6 = \underline{54}$$

What number makes the equation true?

$$\begin{matrix} 3 \\ 3 \end{matrix} > \cancel{3} \times \underline{7} = 3 \times \underline{7} + 3 \times \underline{7}$$

$$? = \underline{6}$$

$$\begin{matrix} 5 \\ 2 \end{matrix} > \cancel{4} \times \underline{7} = 5 \times \underline{8} + 2 \times \underline{8}$$

$$? = \underline{8}$$

$$5. \quad 1 \times \underline{9} + 5 \times \underline{9} = \underline{9} \times \underline{?}$$

$$\underline{6} = ?$$

$$6. \quad \underline{6} \times \underline{2} + \underline{6} \times \underline{2} = \underline{6} \times \underline{?}$$

$$\underline{4} = ?$$

How can you decompose one of the factors to find the product?

$$7. \quad 8 \times 6 = \frac{4}{4} \times 6 + \frac{4}{4} \times 6$$

$$8 \times 6 = \frac{24}{24} + \frac{24}{24}$$

$$8 \times 6 =$$

48

$$8. \quad 9 \times 7 = \frac{5}{2} \times 5 + \frac{4}{2} \times 2$$

$$9 \times 7 = \frac{45}{45} + \frac{18}{18}$$

$$9 \times 7 =$$

63

$$9. \quad 9 \times 8 = \frac{5}{4} \times 8 + \frac{4}{4} \times 8$$

$$9 \times 8 = \frac{40}{40} + \frac{32}{32}$$

$$9 \times 8 =$$

72

$$10. \quad 8 \times 4 = \frac{5}{3} \times 4 + \frac{3}{3} \times 4$$

$$8 \times 4 = \frac{20}{20} + \frac{12}{12}$$

$$8 \times 4 =$$

32

11. **STEM Connection** Some nurses work 8 hours each day for 7 days. How many hours do some nurses work in 7 days? Explain your strategy.

$$\begin{aligned} 4 & \rightarrow 8 \times 7 = \\ & 4 \times 7 + 4 \times 7 \\ & 28 + 28 = 56 \end{aligned}$$



12. **Extend Your Thinking** If you decompose a factor in a multiplication equation in different ways to multiply, will the product always be the same? Explain.

Yes, same array when do it in any arranges of same factor does not

How can you use the 2s fact to find the unknown?

1. $8 \times 2 = 16$ $4 \times 8 = 32$ $16 + 16 = 32$ double
2. $2 \times 3 = 6$ $4 \times 3 = 12$
3. $2 \times 9 = 18$ $9 \times 4 = 36$ $18 + 18 = 36$
4. $5 \times 2 = 10$ $5 \times 4 = 20$
5. $6 \times 2 = 12$ $6 \times 4 = 24$ $12 + 12 = 24$

How can you decompose to solve the problem?

Show your thinking.

small number multiply (X)

6. Mrs. Turner uses 9 eggs every week to make breakfast for her family. How many eggs does she use in 4 weeks?

$$\begin{array}{l} 2 \\ 2 \end{array} \times 4 \times 9 = 36$$

$$2 \times 9 + 2 \times 9$$

$$18 + 18 = 36$$

7. Tyler made 4 friendship bracelets for each of his friends. How many bracelets did he make if he has 8 friends?

$$\begin{array}{l} 2 \\ 2 \end{array} \times 4 \times 8 = 32$$

$$2 \times 8 + 2 \times 8$$

$$16 + 16 = 32$$

8. Luis babysits for 4 hours. He makes \$6 per hour. How much does he make in all?

$$\begin{array}{l} 2 \\ 2 \end{array} \times 4 \times 6 = 24$$

$$2 \times 6 + 2 \times 6$$

$$12 + 12 = 24$$

Error Analysis Zara found the product of 4×7 . She followed these steps.

- ① First, she found the product of 2×7 , which is 14.
- ② Then, she added $14 + 14 = 28$.

Zara says that $4 \times 7 = 28$. Do you agree or disagree? Explain.

yes / because she decompose then double

10. What completes the equation?

$3 \times 4 = \underline{12}$

$28 = \underline{7} \times 4$

$4 \times \underline{10} = 10 \times 4$

$5 \times \underline{4} = 20$

$4 = 4 \times \underline{1}$

$6 \times 4 = \underline{4} \times 6$

$16 = 4 \times \underline{4}$

$\underline{36} = 4 \times 9$

11. Which is equal to 9×4 ?

☒ **A.** $9 \times 2 + 9 \times 2$

☒ **B.** $9 \times 4 + 9 \times 1$

☒ **C.** $5 \times 2 + 4 \times 2$

☒ **D.** $2 \times 4 + 2 \times 4$

12. Extend Your Thinking How can you use properties to find the products of 4×2 , 4×6 , and 4×0 ? Explain.

Commutative $4 \times 2 = 8$
So $2 \times 4 = 8$

$2 \times (4 \times 6)$
 $2 \times 6 + 2 \times 6$
 $12 + 12 = 24$

Farida Alhammad

Farida Alhammad

(Distributive)

$4 \times 0 = 0$

Patterns
any number
multiply by
 $0 = 0$



الأسئلة الكتابية



EoT_T1_Coverage_Grade 3

هيكل مادة الرياضيات للصف الثالث
الفصل الدراسي الأول

Math Teacher:

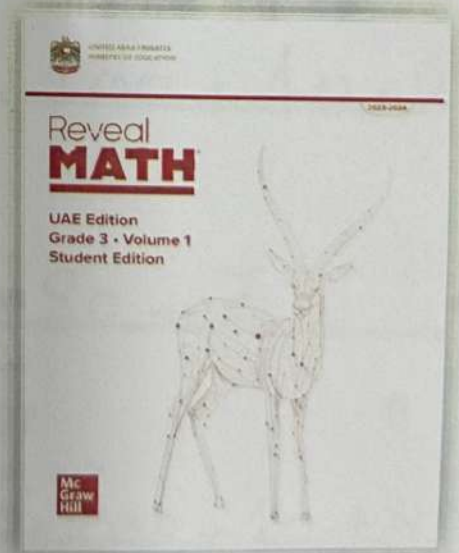
Farida Alhammadi



Good Luck!

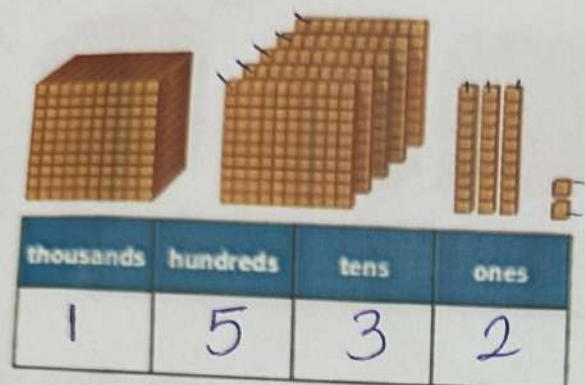
School Principal :

Bakheeta Almansoori

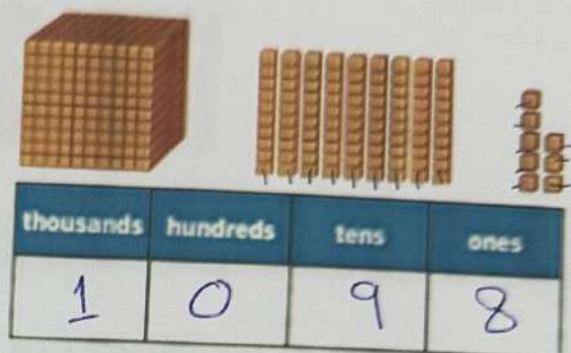


What number is represented by the base-ten blocks?

1.



2.



How can you represent the number in the place-value chart and in expanded form?

3. 2,446

thousands	hundreds	tens	ones
2	4	4	6

$$2,000 + 400 + 40 + 6$$

4. 4,729

thousands	hundreds	tens	ones
4	7	2	9

$$4,000 + 700 + 20 + 9$$

How can you represent the number shown in standard form and expanded form?

5. three thousand, one hundred twelve

3,112

$3,000 + 100 + 10 + 2$

6. six thousand, eighty-seven

6,087

$6,000 + 80 + 7$

7. seven thousand, two hundred twenty-four

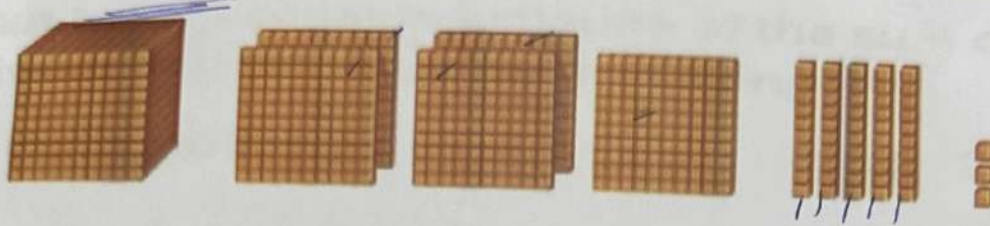
7,224

$7,000 + 200 + 20 + 4$

How can you represent the number shown in standard and expanded form?

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8.



1,553

$1,000 + 500 + 50 + 3$

How can you represent the number in standard form?

9. $8,000 + 500 + 2$

10. $9,000 + 50 + 2$

8,502 8 | 5 | 0 | 2

9,052 9 | 0 | 5 | 2

11. **STEM Connection** 1,455 customers visited Saffron's pastry shop this month. Last month 1,355 customers came to the shop. Explain how she can use place value to determine the difference in the number of customers.

100

one hundred

$1400 - 300 = 100$

$$\begin{array}{r} 1,455 \\ - 1,355 \\ \hline 0(100) \end{array}$$



12. **Extend Your Thinking** Use the digits shown to write a number with the least possible value. Write the number in standard form, expanded form, and word form.

أبسط
~ greatest

3 8 8 2

2,388

$2000 + 300 + 80 + 8$

* You can round to nearest 10
or nearest 100

Page : 45

What is a reasonable estimate of the sum or difference?
Write or draw to show your thinking.

1. $423 + 168 = ?$

$400 + 200 = 600$

2. $? = 695 - 205$

$700 - 200 = 500$

3. $? = 317 + 248$

$300 + 200 = 500$

4. $473 + 218 = ?$

$500 + 200 = 700$

5. $798 - 307 = ?$

$800 - 300 = 500$

6. $? = 835 - 466$

$800 - 500 = 300$

7. How can you use rounding to estimate the sum of $389 + 223$?

to nearest 100

or

to nearest 10

$389 + 223$

$400 + 200 = 600$

$389 + 223$

$390 + 220 = 610$

8. A complete set of baseball cards has 678 cards.

Julio needs 273 more cards to complete his set. How can you use rounding to find about how many cards are in Julio's collection?

$678 + 273$

$700 + 300$

$= 1,000$

9. The Comic Book Shack displays 318 comic books near the front door and keeps 502 comic books in the storage room. How can you use compatible numbers to find about how many comic books are in the store? Round

$$\begin{array}{r} 502 + 318 \\ 500 + 300 = 800 \end{array}$$

10. **STEM Connection** Saffron's bakery needs to decorate 355 cupcakes for an event. It has decorated 223 so far. How can she determine about how many more cupcakes they need to decorate? Round

$$\begin{array}{r} 355 - 223 \\ 400 - 200 = 200 \end{array}$$



11. Melinda estimates she traveled 830 miles last Monday and Tuesday. She traveled 412 miles on Tuesday. About how many miles could she have traveled on Monday? Round

$$\begin{array}{r} 830 - 412 \\ 800 - 400 = 400 \end{array}$$

12. **Extend Your Thinking** Jason has 744 flyers to deliver. If he has delivered 62 flyers at each of his last 2 stops, about how many flyers does he have left to deliver?

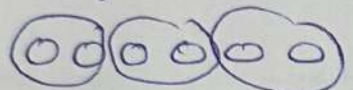
1 $62 + 62$
 $60 + 60 = 120$

2 $744 - 120$
 $700 - 100 = 600$


* لسؤال عن عدد التوزيع (قسمة)

How can you draw a representation and answer the question?


1. 6 dogs \div
2 dogs at each water bowl
How many water bowls?

$$6 \div 2 = 3$$


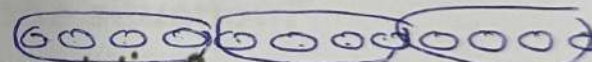
2. 8 balloons \div
2 balloons for each child
How many children?

$$8 \div 2 = 4$$


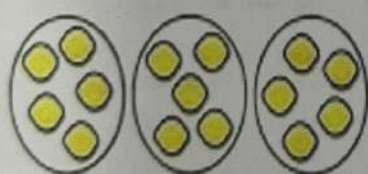
3. 10 plates \div
5 plates on each table
How many tables?

$$10 \div 5 = 2$$


4. 12 beads \div
4 beads for each bracelet
How many bracelets?

$$12 \div 4 = 3$$


Which division equation describes the representation?

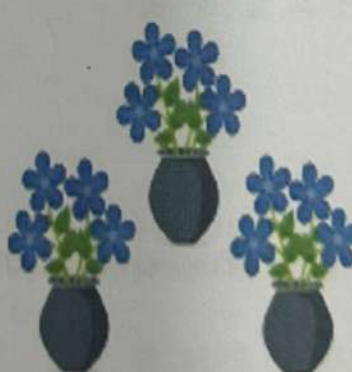
5. 

A. $15 \div 3 = 5$

~~B. $15 = 3 \div 3$~~

~~C. $15 \div 5 = 5$~~

~~D. $12 \div 5 = 5$~~

6. 

~~A. $12 \div 4 = 4$~~

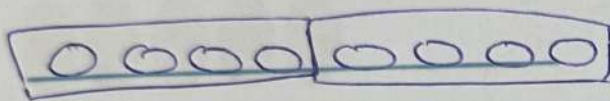
~~B. $12 = 3 \div 4$~~

~~C. $12 \div 5 = 4$~~

D. $12 \div 3 = 4$

How can you write and solve an equation for the situation?

7. 8 students divided into
4 groups $8 \div 4 = 2$



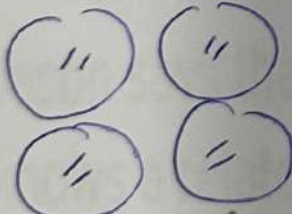
8. 10 players divided into
2 teams $10 \div 2 = 5$



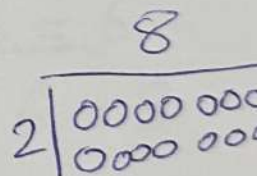
* للرسم نرسم واحدة فقط منهم لأنهم الرسم سيقولون
نفس الشيء
للحزب أو لشيء

How can you draw an array to represent the situation?

1. 4 groups of 2 = 8 $4 \times 2 = 8$
8 divided by 4 = 2

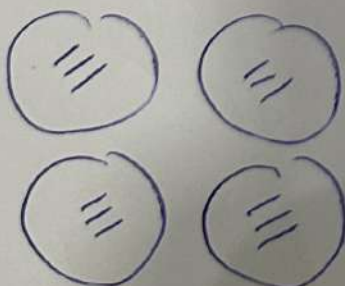


2. $2 \times 8 = 16$
 $16 \div 2 = 8$



How can you draw an equal group to represent the situation?

3. $4 \times 3 = 12$
4 groups of 3 = 12
12 divided by 4 = 3



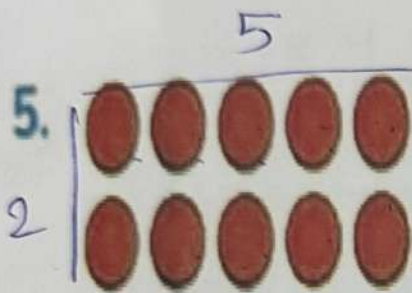
4. $3 \times 5 = 15$
 $15 \div 3 = 5$



أولاً :

* ملاحظة في الامتحان [لما نشوف Array نضع الذرقا]

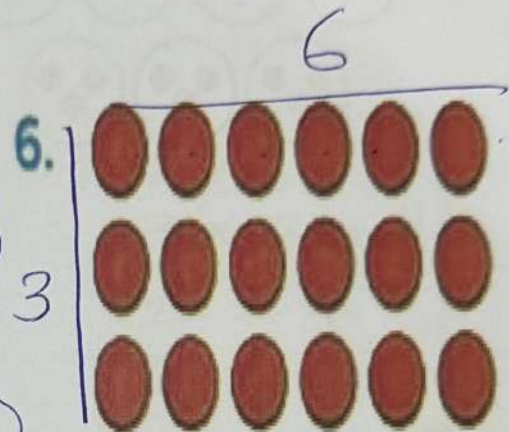
How can you write a division equation for the representation?



$$2 \times 5 = 10$$

$$\begin{array}{l} 10 \div 2 = 5 \\ 10 \div 5 = 2 \end{array}$$

الفصل
دائماً
نبدأ
بالضرب



$$3 \times 6 = 18$$

$$\begin{array}{l} 18 \div 3 = 6 \\ 18 \div 6 = 3 \end{array}$$

7. Jason says that because he knows $6 \times 2 = 12$, he also knows a related division equation. Explain why you agree or disagree.

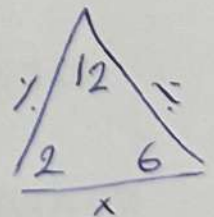
yes I agree

$$6 \times 2 = 12$$

So,

$$12 \div 6 = 2$$

or $12 \div 2 = 6$



Write a multiplication and a division equation to represent each model.



5
4
20

$$5 \times 4 = 20$$

$$4 \times 5 = 20$$

$$20 \div 4 = 5$$

$$20 \div 5 = 4$$



7
3
21

$$7 \times 3 = 21$$

$$3 \times 7 = 21$$

$$21 \div 7 = 3$$

$$21 \div 3 = 7$$

10. STEM Connection Finn has 245 days to complete 3 parts of a construction project. He wants to spend the same number of days on each part. How can you write a multiplication and a division equation to represent the problem? Use a ? for the unknown.

$$245 \div 3 = a$$

$$3 \times a = 245$$



11. How can 9 pairs of shoes represent a multiplication and a division equation?

$$9 \times 2 = 18$$

$$18 \div 2 = 9$$

$$2 \times 9 = 18$$

$$18 \div 9 = 2$$

12. Extend Your Thinking Mr. Mack gives 3 pencils to each of his students. He had 24 pencils. How can you use the multiplication equation $8 \times 3 = 24$ to find how many students he has in class?

$$24 \div 3 = 8$$

0, 1, 2, 5, 10

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How can you use what you know about multiplication to answer the question?

1. Multiples of 2 and 10 are always even.

2. Multiples of 10 always have a 0 in the ones place.

3. The product of any number and 1 is itself. نفسه

4. The product of any number and 0 is always 0. دائماً صفر

How can you complete the equation?

5. $5 \times 3 = \underline{15}$ 5 10 15

6. $2 \times 7 = \underline{14}$

$7+7=14$

7. $\underline{0} \times 8 = \underline{0}$

8. $\underline{40} = 10 \times 4$

9. $\underline{30} = 5 \times 6$

10. $9 \times \underline{1} = 9$

5 10 15 20 25 30

11. Felix has fewer than 10 nickels in his piggy bank. How many 5 cents might he have? Explain how you know. أقل من 10

10 أقل من 9

0, 5, 10, 15, 20, 25, 30, 35, 40, 45

12. The Lee family buys pairs of mittens for their vacation. Can the Lee family buy 17 mittens in all? Explain.

No, because

17 not

Farida Alhammadi

product of $\frac{2}{10}$

17 is odd

× عدد صغير } each
÷ عدد كبير

(1-12)

(1-8)

(9-12)

149

153

154

Page : 153

How can you write a multiplication and division equation for the problem? Write a ? for the unknown.

1. ⁸ Eight friends share 40 apple slices. If each friend receives the same amount of apple slices, how many does each person receive?

$40 \div 8 = ?$
 $8 \times ? = 40$
 $? = 5$

* توزيع
one
by
one

2. ³ 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?

$21 \div 3 = ?$
 $3 \times ? = 21$
 $? = 7$

3. ⁷ 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?

$56 \div 7 = ?$
 $7 \times ? = 56$
 $? = 8$

4. ⁵ June earns \$25 for working five hours. If she earns the same amount each hour, how much does she get paid per hour?

$25 \div 5 = ?$
 $5 \times ? = 25$
 $? = 5$

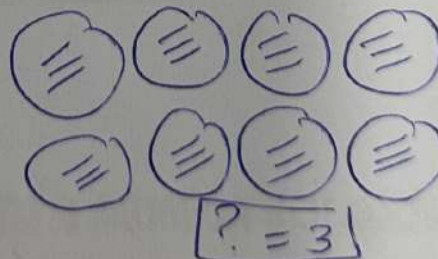
How can you draw a representation for the set of equations?

5. $6 \times ? = 18$
 $18 \div 6 = ?$

$? = 3$



6. $8 \times ? = 24$
 $24 \div 8 = ?$

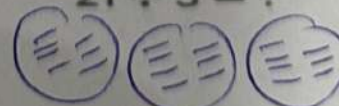


7. $9 \times ? = 36$
 $36 \div 9 = ?$

$? = 4$



8. $3 \times ? = 21$
 $21 \div 3 = ?$



$? = 7$

* في قسم العدد
الصغير
في مجموعات
و نوزع
one
by
one
طريقة
في السؤال
?

* لما يكون رقم واحد في اطراف العدد فبذلك يكون الرقم انساني

9. Sam bought tickets to the county fair. How much did each ticket cost if each costs the same amount? $36 \div 6 = ?$
 $6 \times ? = 36$

$? = 6$



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?

$35 \div 5 = ?$
 $5 \times ? = 35$

$? = 7$

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.

$24 \div 4 = ?$
 $4 \times ? = 24$

$? = 6$



12. **Extend Your Thinking** Describe a situation that could be represented by the equations $4 \times ? = 12$ and $12 \div 4 = ?$. Then solve.

$? = 3$



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1. The array represents 3×4 . How can you use it to find the product of 3×8 ? Draw to show your work.



$$3 \times 8 = \underline{24}$$

Double

$$12 + 12 = 24$$

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$$\begin{array}{l} 3 \times 8 \\ 3 \times 4 + 3 \times 4 \\ 12 + 12 = 24 \end{array}$$

2. Jonathan placed cubes in 8 rows, with 6 cubes in each row. How can you decompose a factor to find the number of cubes he placed?

$$4 \times 8 \times 6$$

$$\begin{array}{r} 4 \times 6 \\ 24 \end{array} + \begin{array}{r} 4 \times 6 \\ 24 \end{array} = 48$$

3. How can you find the products of 1×8 and 8×1 without decomposing?

$$1 \times 8 = 8$$

$$8 \times 1 = 8$$

Commutative

How can you use 2s and 4s facts to complete 8s facts? Double

$$4. \quad 2 \times 3 = \underline{6}$$

$$4 \times 3 = \underline{12}$$

$$8 \times 3 = \underline{24}$$

$$5. \quad 2 \times 4 = \underline{8}$$

$$4 \times 4 = \underline{16}$$

$$8 \times 4 = \underline{32}$$

$$6. \quad 2 \times 5 = \underline{10}$$

$$4 \times 5 = \underline{20}$$

$$8 \times 5 = \underline{40}$$

7. Complete each step to find the product of 8×9 using a 5s fact and a 3s fact.

$$5 \times 9 = 45$$

$$3 \times 9 = 27$$

$$27 + 45 = 72$$

$$8 \times 9 = 72$$

$$5 \times 9 + 3 \times 9$$

$$45 + 27$$

$$= 72$$

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8. **Error Analysis** Tobias says that he can find the product of 4×8 by decomposing either of the factors into equal parts.

Do you agree or disagree? Explain. yes, he can decompose 4 or 8

$$4 = 2 + 2 \quad \text{or} \quad 8 = 4 + 4$$

How can you complete the equation?

9. $24 = 3 \times 8$

10. $7 \times 8 = 56$

11. $6 \times 8 = 48$

12. $80 = 10 \times 8$

13. $8 \times 4 = 32$

14. $8 \times 8 = 64$