

Grade 4 Unit 2 Module 2 Practice Pages for Math at Home

The Bridges Second Edition Module Packets, available from the Home Learning Resources page of the Bridges Educator Site, are designed to provide a review of math topics that were covered in class prior to school closures. They are meant for teachers to send home, so students can continue to engage with key grade-level skills. The material in these packets includes exercises that can be completed by students at home with their families.

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Groceries & Laundry

- **1** Gregory bought some apricots for his 3 sisters. Each apricot cost 15¢. He bought 3 apricots for each sister.
 - **a** How much did Gregory spend altogether? Show all your work.
 - **b** Fill in the bubble beside the equation that best represents this problem (*m* stands for money).
 - $\bigcirc 3 \times (3 \times 15^{\texttt{c}}) = m$
 - $\bigcirc \quad 3+15 \ \ +3=m$
 - $\bigcirc \quad (3 \times 15^{\texttt{c}}) 3 = m$
- **2** Lucia bought 3 pounds of carrots for 75¢ a pound. She also bought a box of crackers. In all, Lucia spent \$4.54.
 - **a** How much did the box of crackers cost? Show all your work.
 - **b** Fill in the bubble beside the equation that best represents this problem (*c* stands for the cost of the crackers).
 - \bigcirc \$4.54 *c* = 75¢
 - \bigcirc (3 × 75¢) + c = \$4.54
 - \bigcirc (3 + 75¢) × *c* = \$4.54
- **3 CHALLENGE** DJ is doing laundry in his apartment building. It costs \$1.00 to run the washing machine and \$1.25 to run the dryer. DJ has 27 quarters. How many loads of laundry can he put through the washer and dryer? Show all your work.

Multiplication Practice

1 Solve these problems with mental computation. Write the answers.

10	20	30	40	50	60	70
<u>× 3</u>	\times 3	\times 3	<u>× 3</u>	<u>× 3</u>	<u>× 3</u>	<u>× 3</u>
80	90	100		1,000	10,000	100,000
<u>× 3</u>	\times 3	<u>× 3</u>	<u>></u>	< <u>3</u>	<u>× 3</u>	<u>× 3</u>

2 Explain how you figured out the answers to the problems above.

3 Solve these problems in your head. Write the answers.

10	20	30	40	50	60	70
<u>× 4</u>	<u>× 5</u>	<u>× 7</u>	<u>× 2</u>	<u>× 5</u>	<u>× 4</u>	<u>× 5</u>
80	90	100	1,000	60	70	80
$\times 4$	<u>× 5</u>	<u>× 8</u>	<u>× 9</u>	<u>× 8</u>	<u>× 2</u>	<u>× 5</u>
400	300	500	600	200	700	800
\times 4	<u>× 6</u>	<u>× 5</u>	<u>× 9</u>	<u>× 8</u>	<u>× 4</u>	<u>× 5</u>
CHALLEN	GE					
900	400	800	600	700	800	800
<u>× 9</u>	<u>× 12</u>	<u>× 9</u>	<u>× 12</u>	<u>× 11</u>	\times 8	<u>× 12</u>

4

Ratio Table Practice

1 This is part of a ratio table made by a fourth grade student.

\sim	$\sim \sim \sim$	
3	45	
4	60	
5	75	
6	90	
7	105	
~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~

- **a** What number was the student multiplying for this ratio table? _____
- **b** What number would come ne×t in each column? _____ and _____
- **2** Fill in the ratio table below.

1	7
2	14
3	
	28
5	
	42

- **3** Is 21 a prime number? How do you know?
- **4** Fill in the blanks in the table below.

2 × = 28	×3=42	4 × 14 =
9 × = 54	×7=63	9 × 8 =
×12 = 24	3 × = 36	4 × 12 =

# More Multiplication

**1** Fill in the Multiple Wheel.



- **2** For the problem  $22 \times 10$ , which of the following statements is **not** correct?
  - $\bigcirc$  22 × 10 is 10 twenty-twos.
  - $\bigcirc$  22 × 10 has to be more than 200 because 20 × 10 = 200.
  - $\bigcirc$  22 × 10 is 22 add 0.
  - $\bigcirc$  22 × 10 is 22 tens.
- **3** Fill in the blanks.



 $\bigcirc 6 \times 6 = 36$ 

### Which Operation? page 1 of 3

**1** Josie was planning a party. She drew a sketch of how she wanted to set up the chairs and tables. Which equation best represents the number of chairs she sketched?

$$\bigcirc 4+6=10$$



**2** There were 24 kids at Josie's party (including her), and each of them ate 3 pieces of pizza. Which expression shows how many pieces of pizza they ate in all?

 $\bigcirc 3+24 \qquad \bigcirc 24-3 \qquad \bigcirc 24 \div 3 \qquad \bigcirc 24 \times 3$ 

- **3** At the end of the party, the kids broke open the piñata. When they scrambled for the candy, Gabe got 5 pieces. Maria got 3 times as many pieces as Gabe. Which of the numbers described below shows how many pieces of candy Maria got?
  - $\bigcirc$  The sum of 5 and 3
  - The product of 5 and 3

- The difference between 5 and 3
- $\bigcirc$  The quotient of 5 and 3
- **4** Josie has 5 gallons of fruit punch. This table shows how many cups there are in different numbers of gallons.

Gallons	Cups
1	16
2	32
3	48

What is one way to figure out how many cups of punch that is?

- O Add 16 to 5
- O Divide 16 by 5

- O Multiply 5 by 16
- Subtract 5 from 16

(continued on next page)

#### Which Operation? page 2 of 3

5 Draw a line to match each story problem below to the equation that best shows how to solve the problem. Then complete each equation. You can use the Base Ten Grid Paper on the next page if you like.

а	Josie's mom bought 4 packages of mini-candy bars to put in the piñata. There were 28 in each package. How many mini-candy bars were there in all?	28 + 4 =
b	Josie got 28 napkins out of the package but then realized that she could put 4 of them away. How many did she set out on the tables?	28 - 4 =
C	Josie's brother blew up 28 balloons for the party and had enough to put 4 at each table. How many tables were there?	28 × 4 =
d	Josie had \$28 in her savings account. Josie earned \$10 helping with chores. Josie spent \$6 right away, but she put the other \$4 in her account. How much money did she have in her savings account then?	28 ÷ 4 =

**6** Write a story problem for each of the two equations below, and then solve your own problems. Use the Base Ten Grid Paper on the next page if you like.

	Equations	Story Problems	Solution
а	$16 \times 8 =$		
b	$16 \div 8 =$		

7 **CHALLENGE** Josie's mom bought 9 pizzas for the party. How will she need to cut them in order to have enough pieces for the party? (See Problem 2 for more information.) Use numbers, sketches, or words to show your work on another sheet of paper.

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#### Which Operation? page 3 of 3

### **Base Ten Grid Paper**

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## Coins & Arrays page 1 of 2

1 Write a multiplication equation to show how much each group of coins is worth.

Coin		Group of Coins	Multiplication Equation
URIBUS ALL	ex	5 nickels	5 × 5¢ = 25¢
	а	10 nickels	
instates of b	b	15 nickels	
	с	10 dimes	
	d	20 dimes	
	е	30 dimes	
LIBERTP	f	8 quarters	
	g	12 quarters	
1981	h	17 quarters	

**2** Label each array frame below. Then fill it in with labeled rectangles. Write an equation to show how you got the total, and then write a multiplication equation to match the array. (Cut out the base ten area pieces if you want to build the arrays.)

		Labeled Array Frame	& Rectangles	i	Addition Equation	Multiplication Equation
ex	4   [	10 4 × 10	<u> </u>		40+16=56	4×14=56
а	   					

#### (continued on next page)

#### Unit 2 Module 2 Session 3

#### Coins & Arrays page 2 of 2

	Labeled Array Frame & Rectangles	Addition Equation	Multiplication Equation
b			
C			

- **3 CHALLENGE** Raina said, "How many different ways are there to make 30¢ using pennies, nickels, dimes, or quarters?"
  - **a** What is this problem asking you to do?
  - **b** Check the strategy you plan to use (check one):
    - ____ guess and check ____ make a table or an organized list
    - ____ draw a diagram ____ other
  - **C** Show your work below.

**d** There are ______ different ways to make 30¢ using pennies, nickels, dimes, or quarters.

32

DATE

### Multiplication Strategies page 1 of 2

**1** Solve these problems in your head. Fill in the blanks.



2 Explain any strategies you used to make it easier to figure out the answers to the problems above.

**3** Solve these problems in your head. Fill in the blanks.

10	20	30	40	50	60	70
$\times$ 4	<u>× 5</u>	$\times$ 7	<u>× 2</u>	<u>× 5</u>	$\times 4$	<u>× 5</u>
80	90	100	1,000	60	70	80
$\times$ 4	× 5	× 8	× 9	× 8	× 2	× 5
400	300	500	600	200	700	800
100	500	500	000	200	700	000
$\times$ 4	<u>× 6</u>	$\times$ 5	$\times$ 9	$\times$ 8	$\times$ 4	$\times$ 5

#### (continued on next page)

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#### Multiplication Strategies page 2 of 2

- **4** Look at the rectangle below. If the area is 240 square centimeters and one side is 12 centimeters, what is the length of the other side?
  - Show your work.
  - Write the answer on the line provided below. Be sure to label it with the correct units.



The length of the side labeled *x* is ______

**5** Sonia measured the cover of the library book she was reading. The length was 10 inches and the width was 5 inches. Which equation below represents how to find the area of her book's cover? Fill in the bubble to show.

$$\bigcirc 10 \div 5 = a$$
  $\bigcirc 10 - 5 = a$   $\bigcirc 10 \times 5 = a$   $\bigcirc 10 + 5 = a$ 

**6** Fill in the ratio table for 31.

		1	2	20		30	10	5		
		31			93				1550	
7	CHALLENGE									
	900	400	80	00	600	)	700		800	800
	<u>× 9</u> <u>×</u>	12	×	9	$\times$ 12	2	<u>× 11</u>		$\times$ 8	<u>× 12</u>

### Groceries & Laundry

- **1** Gregory bought some apricots for his 3 sisters. Each apricot cost 15¢. He bought 3 apricots for each sister.
  - **a** How much did Gregory spend altogether? Show all your work.

### \$1.35; work will vary.

- **b** Fill in the bubble beside the equation that best represents this problem (*m* stands for money).
  - $3 \times (3 \times 15^{\ddagger}) = m$
  - $\bigcirc \quad 3+15 \ (+3) = m$
  - $\bigcirc \quad (3 \times 15 \cmbox{\clubsuit}) 3 = m$
- **2** Lucia bought 3 pounds of carrots for 75¢ a pound. She also bought a box of crackers. In all, Lucia spent \$4.54.
  - **a** How much did the box of crackers cost? Show all your work.

### \$2.29; work will vary.

- **b** Fill in the bubble beside the equation that best represents this problem (*c* stands for the cost of the crackers).
  - $\bigcirc$  \$4.54 *c* = 75¢
  - $(3 \times 75) + c = $4.54$
  - $\bigcirc$  (3 + 75¢) × *c* = \$4.54
- **3 CHALLENGE** DJ is doing laundry in his apartment building. It costs \$1.00 to run the washing machine and \$1.25 to run the dryer. DJ has 27 quarters. How many loads of laundry can he put through the washer and dryer? Show all your work.

# 3 loads of laundry; work will vary.

# Multiplication Practice

**1** Solve these problems with mental computation. Write the answers.

10	20	30	40	50	60	70
× 3	× 3	× 3	× 3	<u>× 3</u>	× 3	× 3
<b>30</b>	60	90	120	150	180	210
80	90	100	1,000	)	10,000	100,000
<u>× 3</u>	× 3	× 3	× 3	<u>)</u>	<u>× 3</u>	× 3
<b>240</b>	270	<b>300</b>	3,000		30,000	300,000

**2** Explain how you figured out the answers to the problems above.

## **Explanations will vary.**

**3** Solve these problems in your head. Write the answers.

10	20	30	40	50	60	70
<u>× 4</u> <b>40</b>	× 5 <b>100</b>	× 7 <b>210</b>	× 2 80	× 5 <b>250</b>	× 4 240	× 5 <b>350</b>
80	90	100	1,000	60	70	80
× 4 <b>320</b>	× 5 <b>450</b>	× 8 800	× 9 9,000	× 8 <b>480</b>	× 2 140	× 5 <b>400</b>
400	300	500	600	200	700	800
× 4 1,600	× 6 1,800	× 5 2,500	× 9 5,400	<u>× 8</u> 1,600	<u>× 4</u> 2,800	<u>× 5</u> <b>4,000</b>
CHALLENGE	Į.					
900	400	800	600	700	800	800
<u>× 9</u> 8,100	<del>× 12</del> <b>4,80</b> 0	<del>× 9</del> 7,200	<del>× 12</del> <b>7,20</b> 0	× 11 <b>7,70</b> 0	<del>× 8</del> 6,400	<u>× 12</u> 9,600

4

### **Ratio Table Practice**

**1** This is part of a ratio table made by a fourth grade student.

$\sim$	
3	45
4	60
5	75
6	90
7	105
$\sim$	



- **b** What number would come ne×t in each column?  $\underline{8}$  and  $\underline{120}$
- **2** Fill in the ratio table below.

1	7
2	14
3	21
4	28
5	35
6	42

- 3 Is 21 a prime number? How do you know?
   No; explanations will vary.
- **4** Fill in the blanks in the table below.



#### NAME



**1** Fill in the Multiple Wheel.



- **2** For the problem  $22 \times 10$ , which of the following statements is **not** correct?
  - $\bigcirc$  22 × 10 is 10 twenty-twos.
  - $\bigcirc$  22 × 10 has to be more than 200 because 20 × 10 = 200.
  - $22 \times 10$  is 22 add 0.
  - $\bigcirc$  22 × 10 is 22 tens.
- **3** Fill in the blanks.



 $\bigcirc 6 \times 6 = 36$ 

DATE

Unit 2 Module 2

### Which Operation? page 1 of 3

- **1** Josie was planning a party. She drew a sketch of how she wanted to set up the chairs and tables. Which equation best represents the number of chairs she sketched?
  - $\bigcirc \quad 4+6=10$



**2** There were 24 kids at Josie's party (including her), and each of them ate 3 pieces of pizza. Which expression shows how many pieces of pizza they ate in all?

$\bigcirc$	3 + 24	$\bigcirc$	24 - 3	$\bigcirc$ 24 ÷ 3	$24 \times 3$

- **3** At the end of the party, the kids broke open the piñata. When they scrambled for the candy, Gabe got 5 pieces. Maria got 3 times as many pieces as Gabe. Which of the numbers described below shows how many pieces of candy Maria got?
  - $\bigcirc$  The sum of 5 and 3
  - The product of 5 and 3

- The difference between 5 and 3
- $\bigcirc$  The quotient of 5 and 3
- **4** Josie has 5 gallons of fruit punch. This table shows how many cups there are in different numbers of gallons.

27

Gallons	Cups
1	16
2	32
3	48

What is one way to figure out how many cups of punch that is?

- Add 16 to 5
- O Divide 16 by 5

- Multiply 5 by 16
  - Subtract 5 from 16

(continued on next page)

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28 + 4 = 32

28 - 4 = 24

 $28 \times 4 = 112$ 

 $28 \div 4 = 7$ 

DATE

#### Which Operation? page 2 of 3

- 5 Draw a line to match each story problem below to the equation that best shows how to solve the problem. Then complete each equation. You can use the Base Ten Grid Paper on the next page if you like.
  - Josie's mom bought 4 packages of mini-candy а bars to put in the piñata. There were 28 in each package. How many mini-candy bars were there in all?
  - b Josie got 28 napkins out of the package but then realized that she could put 4 of them away. How many did she set out on the tables?
  - Josie's brother blew up 28 balloons for the party С and had enough to put 4 at each table. How many tables were there?
  - d Josie had \$28 in her savings account. Josie earned \$10 helping with chores. Josie spent \$6 right away, but she put the other \$4 in her account. How much money did she have in her savings account then?
- 6 Write a story problem for each of the two equations below, and then solve your own problems. Use the Base Ten Grid Paper on the next page if you like.

	Equations	Story Problems	Solution
а	16 × 8 =	Work will vary.	128
b	16 ÷ 8 =	Work will vary.	2

7 **CHALLENGE** Josie's mom bought 9 pizzas for the party. How will she need to cut them in order to have enough pieces for the party? (See Problem 2 for more information.) Use numbers, sketches, or words to show your work on another sheet of paper. She will need to cut them into thirds to have

(continued on next page)



### Which Operation? page 3 of 3

### **Base Ten Grid Paper**

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## Coins & Arrays page 1 of 2

1 Write a multiplication equation to show how much each group of coins is worth.

Coin		Group of Coins	Multiplication Equation
URIBUS GAN	ex	5 nickels	5 × 5¢ = 25¢
	а	10 nickels	$10 \times 5$ ¢ = 50¢
States of B	b	15 nickels	15 × 5¢ = 75¢
	c	10 dimes	10 × 10¢ = 100¢ or \$1.00
	d	20 dimes	20 × 10¢ = 200¢ or \$2.00
	е	30 dimes	30 × 10¢ = 300¢ or \$3.00
LIBERTP	f	8 quarters	8 × 25¢ = 200¢ or \$2.00
	g	12 quarters	12 × 25¢ = 300¢ or \$3.00
1987	h	17 quarters	17 × 25¢ = 425¢ or \$4.25

**2** Label each array frame below. Then fill it in with labeled rectangles. Write an equation to show how you got the total, and then write a multiplication equation to match the array. (Cut out the base ten area pieces if you want to build the arrays.)

		Labeled Array Frar	Addition Equation	Multiplication Equation	
AY	١	10		HO . 16 - 56	
		4 x 10	4 × 4	10+10-00	1×11=00
		10	9		
а	3	3 × 10	3 × 9	30 + 27 = 57	3 × 19 = 57
	_				

#### (continued on next page)

**Answer Key** 

DATE

#### Coins & Arrays page 2 of 2



**3 CHALLENGE** Raina said, "How many different ways are there to make 30¢ using pennies, nickels, dimes, or quarters?"

What is this problem asking you to do?
 Work will vary. Example: Find all the ways to make 30¢ with pennies, nickels, dimes, or quarters.

**b** Check the strategy you plan to use (check one): Work wil vary.

- _____guess and check _____ make a table or an organized list
- _____draw a diagram ______other
- **C** Show your work below.

**d** There are <u>18</u> different ways to make 30¢ using pennies, nickels, dimes, or quarters.

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### Multiplication Strategies page 1 of 2

**1** Solve these problems in your head. Fill in the blanks.

10	20	30	40	50	60	70
<u>× 3</u>	$\times$ 3	<u>× 3</u>	<u>× 3</u>	<u>× 3</u>	$\times$ 3	$\times$ 3
30	60	90	120	150	180	210
80	90	100	1,000	10,000	100,000	1,000,000
× 3	$\times$ 3	$\times$ 3	$\times$ 3	<u>× 3</u>	<u>× 3</u>	<u>× 3</u>
240	270	300	3,000	30 <mark>,000</mark>	300,000	3,000,000

**2** Explain any strategies you used to make it easier to figure out the answers to the problems above.

### Work will vary.

**3** Solve these problems in your head. Fill in the blanks.

10	20	30	40	50	60	70
$\frac{\times 4}{40}$	$\times 5$	$\frac{\times 7}{210}$	$\times 2$	$\times 5$	$\times 4$	$\frac{\times 5}{250}$
40	100	210	80	250	240	300
80	90	100	1,000	60	70	80
$\times 4$	<u>× 5</u>	$\times$ 8	<u>× 9</u>	$\times$ 8	$\times 2$	<u>× 5</u>
320	450	800	9,000	480	140	400
400	300	500	600	200	700	800
$\times 4$	<u>× 6</u>	<u>× 5</u>	<u>× 9</u>	$\times$ 8	$\times$ 4	<u>× 5</u>
1,600	1,800	2,500	5,400	1,600	2,800	4,000

(continued on next page)

#### Multiplication Strategies page 2 of 2

- **4** Look at the rectangle below. If the area is 240 square centimeters and one side is 12 centimeters, what is the length of the other side?
  - Show your work.
  - Write the answer on the line provided below. Be sure to label it with the correct units.



The length of the side labeled *x* is 20 cm

**5** Sonia measured the cover of the library book she was reading. The length was 10 inches and the width was 5 inches. Which equation below represents how to find the area of her book's cover? Fill in the bubble to show.

	$\bigcirc$	$10 \div 5 = a$	$\bigcirc$	10 - 5 = a		$10 \times 5 = a$	$\bigcirc$	10 + 5 = a
--	------------	-----------------	------------	------------	--	-------------------	------------	------------

**6** Fill in the ratio table for 31.

	1	2	20	3	30	10	5	50	
	31	62	620	93	930	310	155	1550	
CHALLENGE									
900	400	80	00	600	)	700		800	800
× 9 8,100	× 12 <b>4,800</b>	× 7,20	<u>9</u> 00	× 12 7,20	2 0	<u>× 11</u> <b>7,700</b>	6	× 8 ,400	<u>× 12</u> 9,600
	<b>CHALLENGE</b> 900 <u>× 9</u> <b>8,100</b>	$ \begin{array}{c c}     1 \\     31 \\ \hline     6 \\     \hline     900 & 400 \\     \times 9 & \times 12 \\     8,100 & 4,800 \\ \hline \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$