MATH – ENGLISH
A Four-Week Recovery Program in Schools
GRADE 4
2021-2022

This material is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of QITABI 2 and do not necessarily reflect the views of USAID or the United States Government. This material was developed by the Joint Academic Department (JAD) and the Equipment Installations and Material Support Bureau (EIMSB) at the Centre of Educational Research and Development (CERD) with the support of USAID-funded QITABI 2 project.

Table of Contents

مقدّمة عامّة:

إنّ العودة إلى المدارس هذه السّنة وبعد غياب سنتين، بسبب جائحة كورونا من جهة، والأزمات الّتي تعصفُ بلبنان من جهة أخرى، تطرح تحدّيات كثيرة أمام نظام التّعليم بأكمله من الجهاز الإداريّ والتّعليميّ إلى الأهل وصولًا إلى المتعلّمين أنفسهم، الّذين كانوا أكثرَ المتضرّرين من البقاء ولفترة طويلة في البيوت، بعيدًا عن جوّ التّفاعل والتّواصل الاجتماعيّ الّذي توفّره بيئة المدرسة، وفي ظلّ غياب فرص تعلّم عادلة فرضتها العوائق اللّوجستيّة والاقتصاديّة وغيرها.

من هنا، كان لا بدّ من إيلاء مسألة العودة إلى المدرسة هذه السّنة اهتمامًا شديدًا من قبل المعنيّين، وبخاصّة عودة المتعلّمين الصّغار من أطفال الحلقة الأولى الّذين يدخل عددٌ وفيرٌ منهم المدرسة لأوّل مرّة، ما يستدعي وضع خطّة مدروسة، تراعي الجوانب النّفسيّة والاجتماعيّة والأكاديميّة لهم، فتعمل على معالجة الثّغرات في المكتسبات والمهارات بدءًا من الأهداف الأساسيّة وكفايات مرحلة الرّوضات، إلى مساعدتهم على الانخراط سريعًا في جوّ المدرسة ونظامها، ودعمهم نفسيًا واجتماعيًا عبر أنشطة التّعبير الانفعاليّ الاجتماعيّ وغيرها من الأنشطة والألعاب لتسريع عمليّة التّأقلم والتّواصل.

مقدّمة مادّة الرّياضيّات

رزمة التّقويم التّشخيصيّ والأنشطة

أعدّت هذه الرّزمة كوسيلة مساعدة للمتعلّمين والمعلّمين ليتمّ استخدامها خلال الاسابيع الاربعة الاولى للعام الدّراسيّ 2021-2022 من أجل ضمان بداية سلسة بعد انقطاع قسريّ دام لعامين دراسيّين ولكي تساعد على ردم هوّة الفاقد التّعليميّ.

تتألّف هذه الرّزمة من أربعة ـجزاء على الشّكل الآتي: أدوات للتّقويم التّشخيصيّ، أنشطة للمراجعة، ألعاب تربويّة، ومعينات.

أدوات التّقويم التّشخيصيّ وأنشطة المراجعة مبنيّة على بعض المفاهيم الأساسيّة والمستمرّة المطلوبة في صفوف الحلقة الأولى والثّانية وهي مكوّنة من بنود تركّز على المهارات والمعارف والمواقف الأساسيّة/الأهداف الّتي يحدّدها المنهج والّتي يجب على المتعلّم(ة) أن يتقنها/تتقنها، ما يخوّل انتقاله(ا) السّلس من السّنة الدّراسيّة السّابقة إلى السّنة الحاليّة.

كل عنصر من عناصر التّقويم التّشخيصيّ يرتبط بنشاط (أنشطة) مراجعة للتّحقّق من اكتساب الهدف المقصود والمتعلّق بمفهوم محدّد وإرسائه في حال عدم تحققّه قبل بداية العام الدّراسيّ.

طريقة التّنفيذ:

- يبدأ المعلّم بتمرير أداة التّقويم التّشخيصيّ في اليوم الأوّل من الأسبوع الأوّل ويحرص على تنفيذها من قبل كل المتعلّمين ومن دون أن يتدخّل ثم يقيّم المعلّم النّتاجات ليكوّن فكرة حول كل متعلّم وحاجاته مع الحرص على عدم إجهار النّتيجة بل الاحتفاظ بها لمساعدته في الخطوات اللّاحقة.
- يمرّر المعلّم أنشطة المراجعة بعد نشاط التّقويم التّشخيصيّ للأسبوع الأوّل على كل المتعلّمين كي تعمّ الفائدة ويقوم بالتّركيز بشكل تمايزيّ على حاجات المتعلّمين التي استخرجها من نشاط التّقويم. ومن أجل تعزيز ومعالجة المفاهيم المقصودة في الأنشطة يستحسن استخدام طرق التّعليم / التعلّم النّاشط.
- تعاد العمليّات السّابقة على الأسبوع الثّاني، والثّالث، والرّابع.
- يمكن استثمار الالعاب التّربويّة مع من ينجز أعماله باكرًا لكي يتسنّى للمتعلّمين بكافّة مستوياتهم الاستفادة من الوقت.
- يمكن استثمار المعينات من قبل المتعلّمين وبتوجيه من المعلّم حيث تدعو الحاجة.

Week 1

NUMBERS UP TO 999 999

Place value and value of a digit-standard and expanded (developed)form- comparison of numbers

Diagnostic Assessment

Learning Activities

Week 2

MULTIPLICATION

Repeated addition and skip counting-multiplication by 10 and 100- multiplication technique

Diagnostic Assessment

Learning Activities

Week 3

DIVISION

Sharing, distributing-family facts and division-division technique

Diagnostic Assessment

Learning Activities

Week 4

FRACTIONS

Diagnostic Assessment

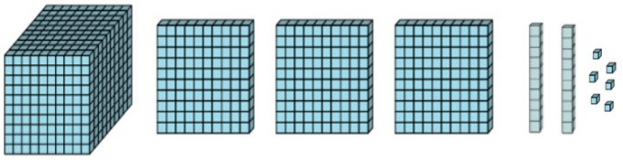
Learning Activities

Material to be used

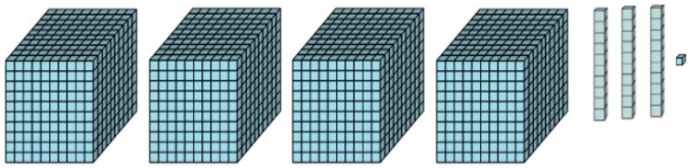
MATH - ENGLISH
Diagnostic Assessment
CYCLE 2 - GRADE 4
Week 1

Check your knowledge (Numbers up to 999 999)

1- Write the number represented by the base-ten blocks below in each case.

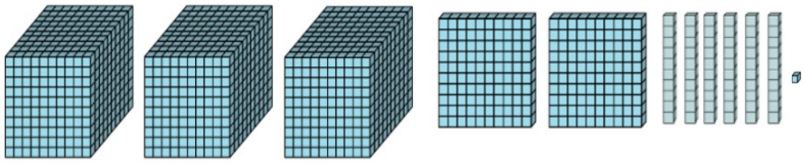


_____



_____

2- What digit is in the tens place of the number below?



_____

3- Circle the place value of the digit 7 in 1 750.

thousands tens hundreds Ones

4- Write the value of the underlined digit in 1<u>9</u> 006 _____

5- Which of these numbers is nine hundred twenty thousand forty?

900 240 90 024 920 400 920 04

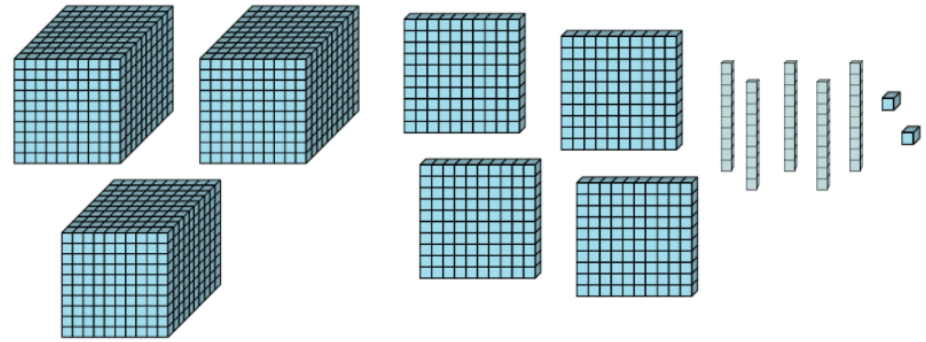
6- Observe and complete.

1 275	1 000 + 200 + 70 +5	1 x 1 000 + 2 x 100 + 7 x 10 + 5
	20 000 + 3 000 + 60 + 1	
		2 x 100 000 + 7 x 1 000 + 8 x 100 + 5 x 10 + 3
980 042		

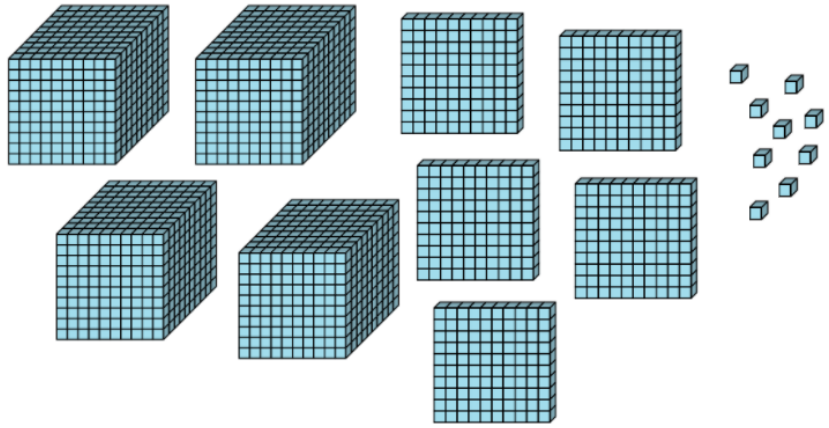
MATH - ENGLISH
Learning Activities
CYCLE 2 - GRADE 4
Week 1

Numbers up to 999 999

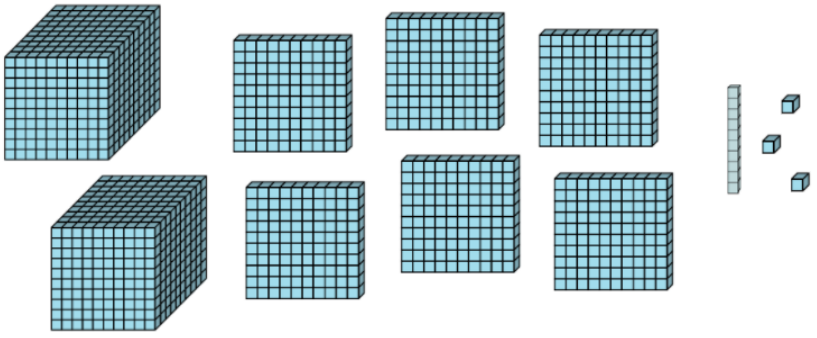
1- Write the number represented by the base-ten blocks below in each case.



_____

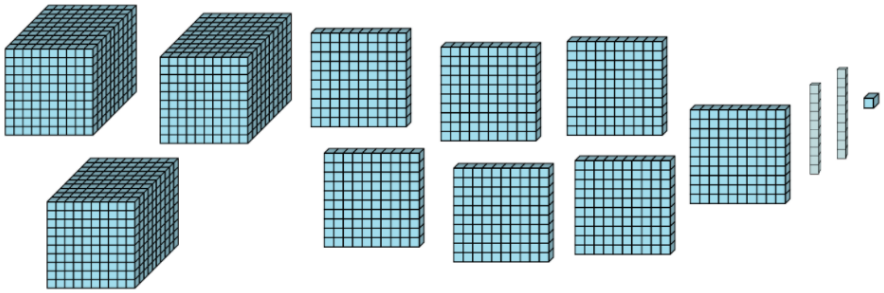


_____

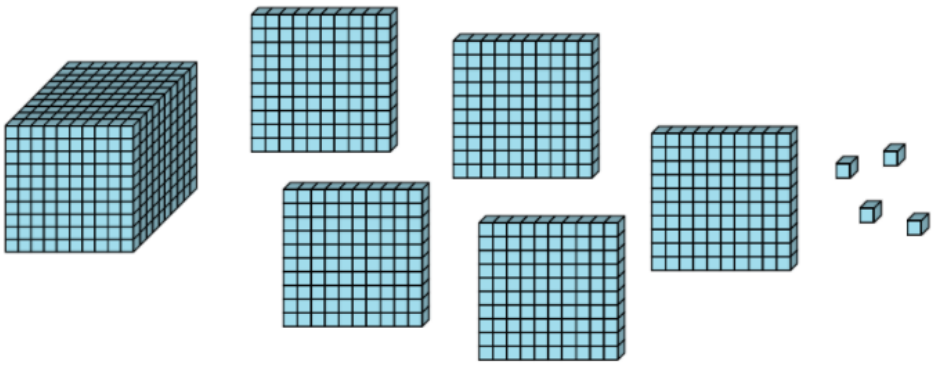


_____

2- What digit is in the hundreds place of the number below?



What digit is in the tens place of the number below?



3- Place the numbers in the place value chart.

452
3 459
653 098

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

4- Circle the correct answer.

What is the place value of 5 in 653?

Thousands Tens hundreds Ones

What is the place value of 5 in 640 153?

Ten thousands Tens Hundreds Hundred thousands

What is the place value of 9 in 9 637?

Ones Thousands Hundreds Tens

What is the place value of the 3 in 234 567?

Tens Hundreds Thousands Ten thousands

5- Write the value of the underlined digit for each of the following numbers:

a) 659 561 _____

b) 142 194 _____

c) 56 111 _____

d) 320 256 _____

6- Circle the correct answer.

Which of these numbers is two hundred forty-eight?

428 248 20 048 200 048

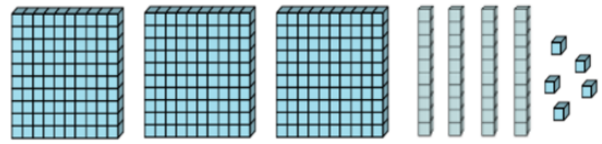
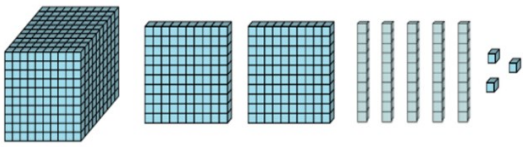
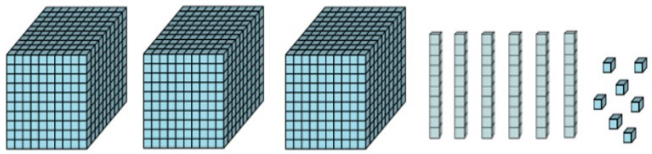
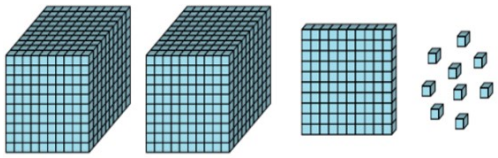
Which of these numbers is forty thousand two hundred five?

40 205 4 205 400 205 40 250

Which of these numbers is one hundred seventy-four thousand five?

1 745 17 405 174 005 174 500

7- Observe and complete the following table.

	345	$300 + 40 + 5$	$3 \times 100 + 4 \times 10 + 5$
			
			
			

MATH - ENGLISH
Diagnostic Assessment
CYCLE 2 - GRADE 4
Week 2

Check your knowledge (Numbers up to 999 999 and multiplication)

1- Use the place-value chart to compare the two numbers.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

Complete by > or <

1 284… 12 894

2- Use the place-value chart to compare the two numbers.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

Complete by > or <

540 876 ... 540 826

3- Compare the following pairs of numbers.

15 220 ... 152 200

1 328 ... 2 139

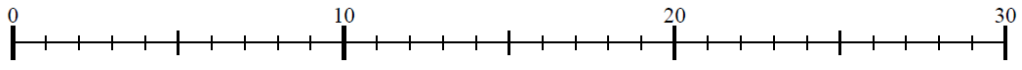
512 679 ... 512 996

4- Write in increasing order (from least to greatest).

870 486 880 111 89 999 870 576

_____

5- Use the number line to solve the problem.



4 × 7 = …

6- Complete.

	$6 + 6$	2×6
		
		

7- Find each product.

$18 \times 10 = \cdots$

$22 \times 100 = \cdots$

$7\,654 \times 10 = \cdots$

$2\,106 \times 100 = \cdots$

MATH - ENGLISH
Learning Activities
CYCLE 2 - GRADE 4
Week 2

Numbers up to 999 999 and multiplication

1- Use the place-value chart to compare the two numbers.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

Complete by > or <

423 668 ... 323 669

Which place value helped you decide which is the bigger number? _____

2- For each pair of numbers below, place them in the place-value chart then compare.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

432 765 ... 43 276

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

197 154 ... 99 999

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

621 546 ... 631 546

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

543 699 ... 543 796

3- Arrange in increasing Order (from least to greatest).

541 961 540 951 540 961 54 999

_____

4- The solar system is composed of a star, the SUN, placed at its center, and of nine main planets.

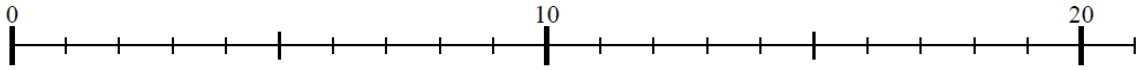
Planet	sign	Diameter in kilometers
Pluto	♇	3 300
Uranus	♅	51 800
Earth	♁	12 742
Mercury	☿	4 878
Jupiter	♃	142 800
Neptune	♆	49 500
Venus	♀	12 100
Saturn	♄	120 000
Mars	♂	6 792

Arrange the diameters of the planets in decreasing order (from greatest to least).

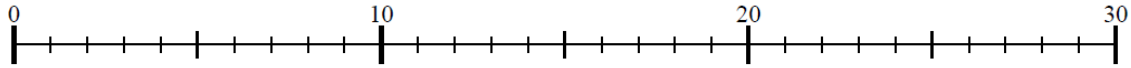
_____

Which planet has the greatest diameter? _____

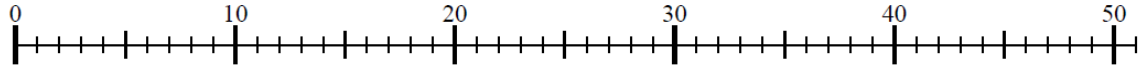
5- Use the number line to solve each problem.



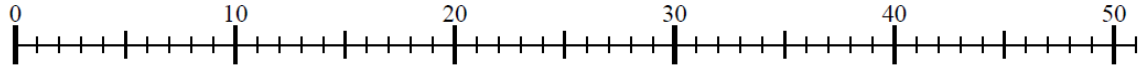
$6 + 6 + 6 = \cdots$ $3 \times 6 = \cdots$



$7 + 7 + 7 + 7 = \cdots$ $4 \times 7 = \cdots$



$8 + 8 + 8 + 8 + 8 + 8 = \cdots$ $6 \times 8 = \cdots$



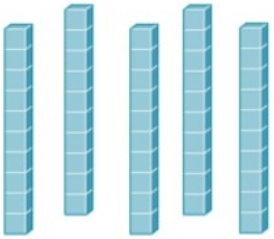
$4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = \cdots$ $4 \times 9 = \cdots$

6- Complete.

	$6 + 6$	2×6
		
		

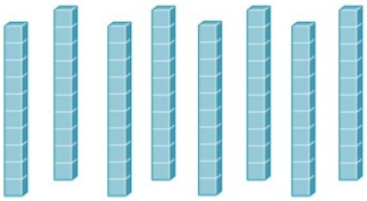
7- Complete.

$5 \times 1 = \ldots$



$5 \times 10 = \ldots$

$8 \times 1 = \ldots$



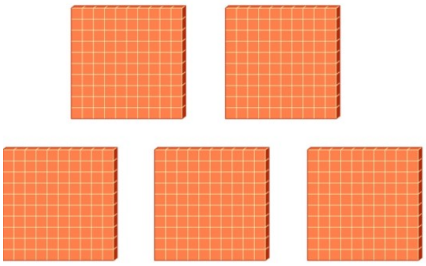
$8 \times 10 = \ldots$

Place the products obtained in the place value chart below and then suggest a rule for multiplying a number by 10.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

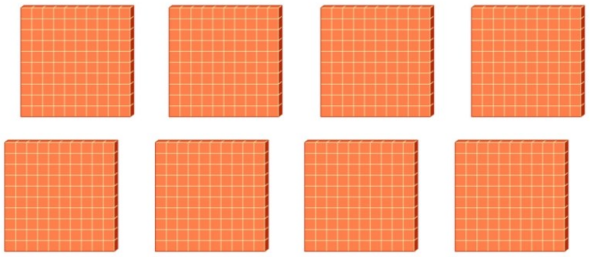
Complete.

$5 \times 1 = \cdots$



$5 \times 100 = \cdots$

$8 \times 1 = \cdots$



$8 \times 100 = \cdots$

Place the products obtained in the place value chart below then suggest a rule for multiplying a number by 100.

Thousands' class			Units' class		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

8- Find each product.

$7 \times 10 = \cdots$

$33 \times 10 = \cdots$

$719 \times 10 = \cdots$

$32 \times 100 = \cdots$

$106 \times 100 = \cdots$

$89 \times 100 = \cdots$

MATH - ENGLISH
Diagnostic Assessment
CYCLE 2 - GRADE 4
Week 3

Check your knowledge (Multiplication and division)

1- Solve each problem.

5 3 9	1 0 6 7	4 5 9 2
x 3	x 8	x 6

2- How many groups of 4 can you make with the 16 stars below? How many stars remain?

Number of groups _____

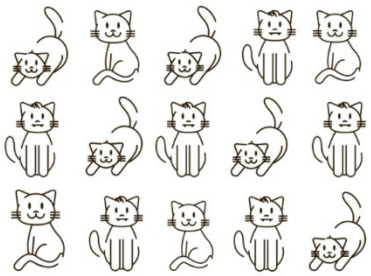
Number of remaining stars _____

3- How many groups of 5 can you make with the 16 stars below? How many stars remain?

Number of groups _____

Number of remaining stars _____

4- How many groups of 6 can you make with the 15 cats below? How many cats remain?

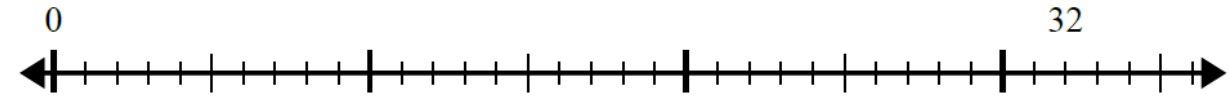


Number of groups _____

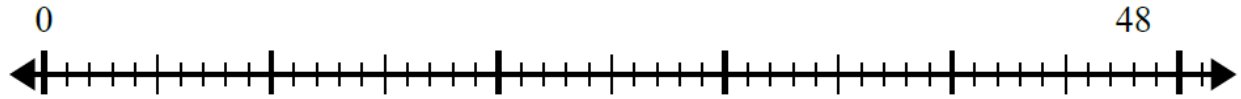
Number of remaining cats _____

5- Use the number line to solve the division problem in each case.

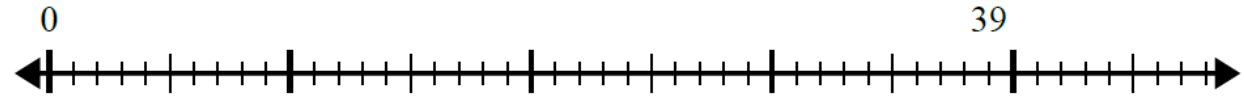
$32 \div 8 = \cdots R \ldots$



$48 \div 4 = \cdots R \ldots$



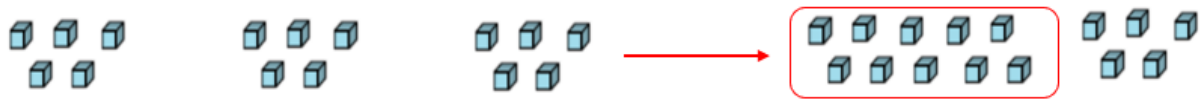
$39 \div 7 = \cdots R \ldots$



MATH - ENGLISH
Learning Activities
CYCLE 2 - GRADE 4
Week 3

Multiplication and division

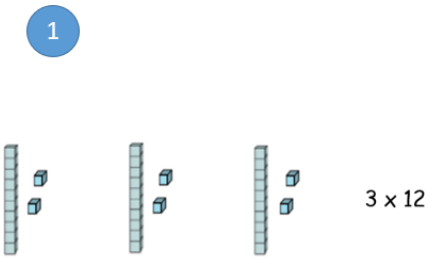
1- Complete.

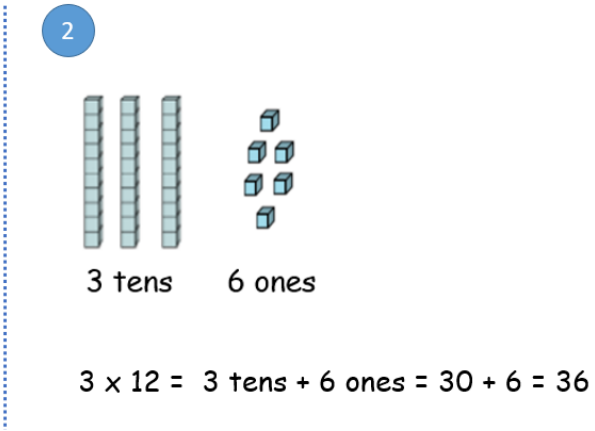


3×5 ones $=$ ⋯ ones $=$ ... ten and … ones

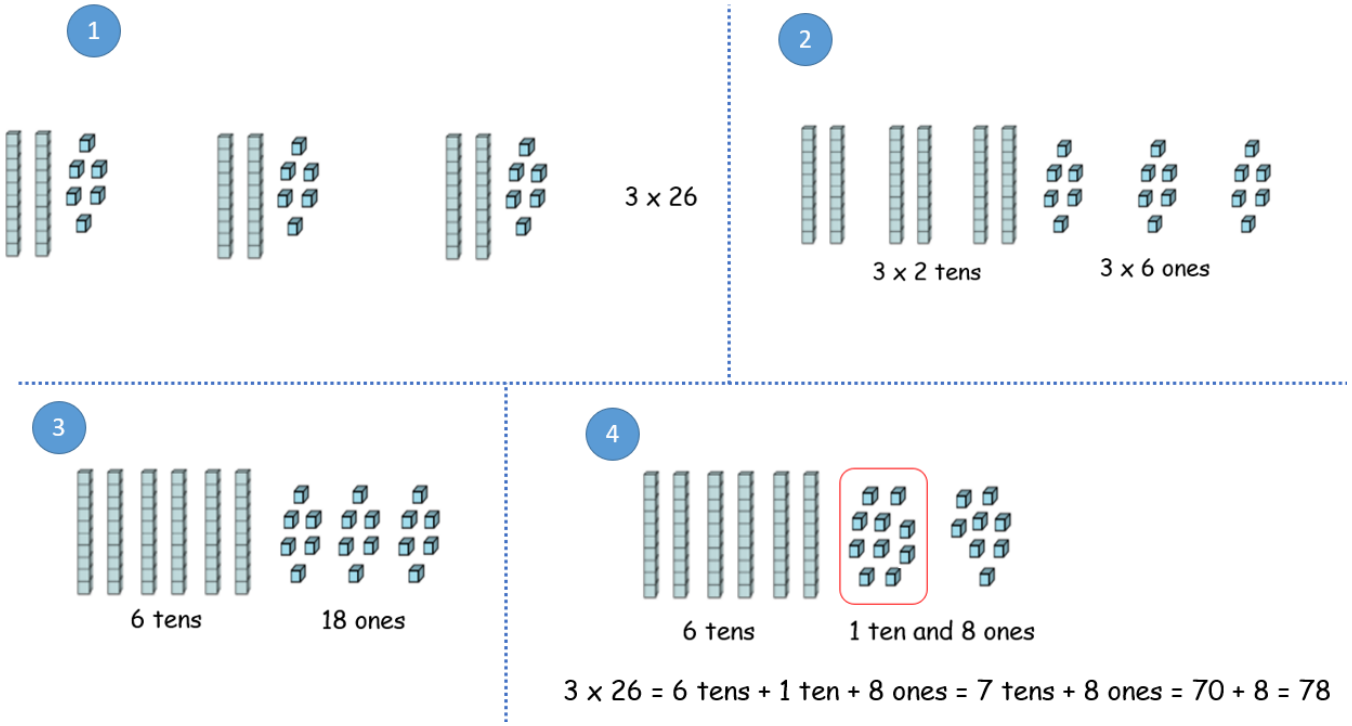
4×2 tens $=$ ⋯ tens $= 4 \times 20 =$ ⋯

Example 1





Example 2



2- Look at the examples above and complete.

2 × 13 = … tens + … ones = … + … = …

4 × 32 = 12 tens + … ones = … hundred + … tens + … ones = … + … + … = …

3 × 25 = … tens + 15 ones = … tens + 1 ten + … ones = … tens + 5 ones = … + 5 = …

5 × 16 = … tens + … ones = … tens + … tens = … tens = …

3- Solve each problem.

$$\begin{array}{r} 284 \\ \times\ \ 8 \\ \hline \end{array} \qquad \begin{array}{r} 605 \\ \times\ \ 5 \\ \hline \end{array} \qquad \begin{array}{r} 493 \\ \times\ \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 568 \\ \times \quad 9 \\ \hline \end{array} \qquad \begin{array}{r} 993 \\ \times \quad 4 \\ \hline \end{array} \qquad \begin{array}{r} 127 \\ \times \quad 3 \\ \hline \end{array}$$

4- Complete the following table.

Rola distributes a box of 45 candies among 9 children. How many candies will each child get?

Number of candies distributed to each child	Number of candies distributed to the 9 children	Total number of candies left to distribute
1	$9 \times 1 = 9$	$45 - 9 = 36$
2	$9 \times 2 = 18$	$45 - 18 = 27$

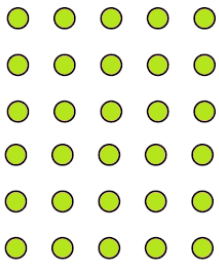
Each child will get … candies.

5- Use the shapes provided to answer the questions.

How many groups of 4 can you make with the 16 shapes below?

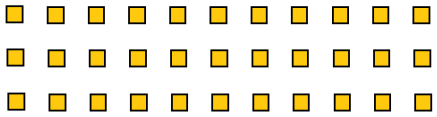
_____

How many groups of 6 can you make with the 30 shapes below?



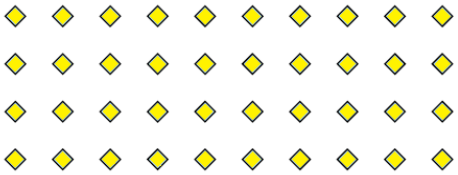
_____

How many groups of 11 can you make with the 33 shapes below?



_____

How many groups of 8 can you make with the 40 shapes below?



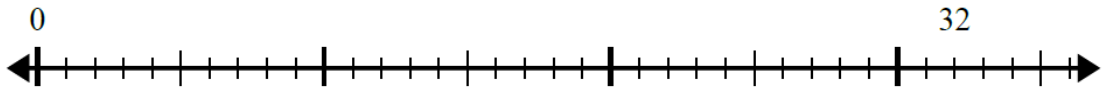
_____

How many groups of 4 can you make with the 60 shapes below?

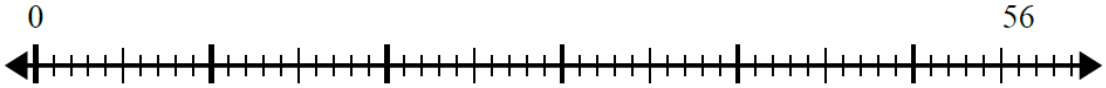
_____

6- Use the number line to solve the division problem in each case.

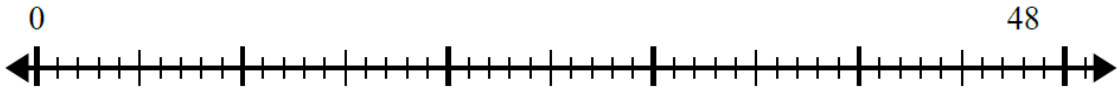
$32 \div 4 = \cdots$



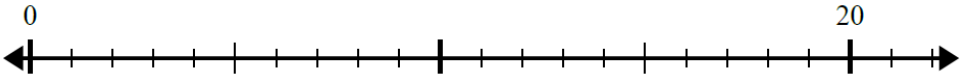
$56 \div 8 = \cdots$



$48 \div 6 = \cdots$



$20 \div 4 = \cdots$

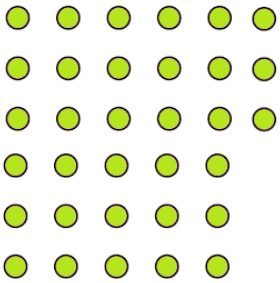


7- How many groups of 4 can you make with the 18 shapes below? How many shapes remain?

Number of groups _____

Number of remaining shapes _____

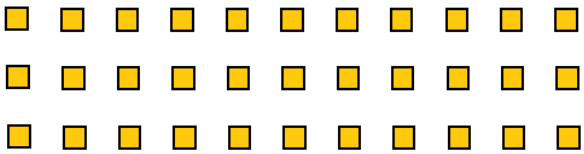
How many groups of 6 can you make with the 33 shapes below? How many shapes remain?



Number of groups _____

Number of remaining shapes _____

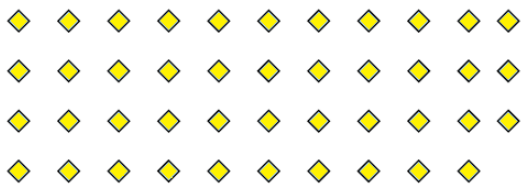
How many groups of 9 can you make with the 33 shapes below? How many shapes remain?



Number of groups _____

Number of remaining shapes _____

How many groups of 8 can you make with the 43 shapes below? How many shapes remain?



Number of groups _____

Number of remaining shapes _____

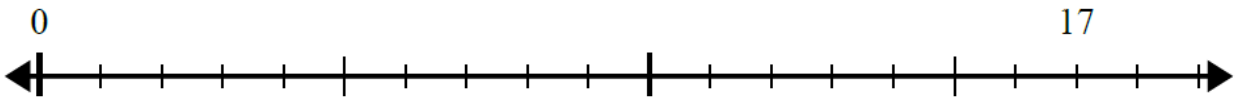
How many groups of 4 can you make with the 62 shapes below? How many shapes remain?

Number of groups _____

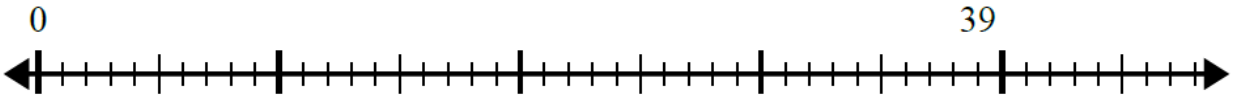
Number of remaining shapes _____

8- Use the number line to solve the division problem in each case.

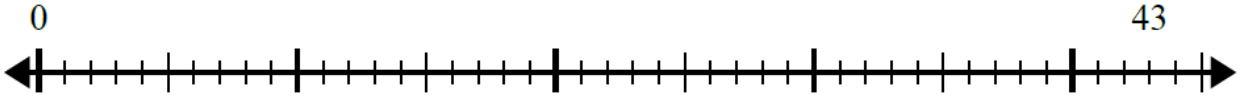
$17 \div 5 = \cdots R \ldots$



$39 \div 5 = \cdots R \ldots$



$43 \div 8 = \cdots R \ldots$



MATH - ENGLISH
Diagnostic Assessment
CYCLE 2 - GRADE 4
Week 4

Check your knowledge (Division and fractions)

1- Complete with the appropriate number.

$42 \div \ldots = 7$ $\ldots \div 7 = 5$

2- Calculate.

$16 \div 8 = \ldots$

$63 \div 7 = \ldots$

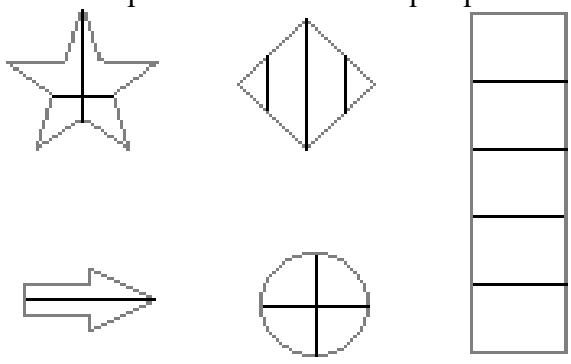
$32 \div 4 = \ldots$

3- Perform the following divisions.

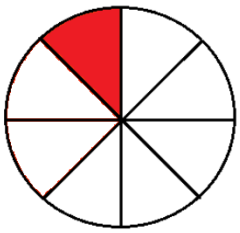
8 5 2	4

7 6 9 1	5

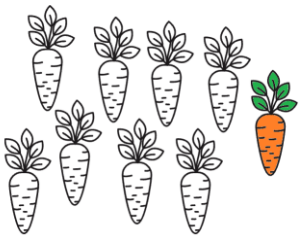
4- Circle the shapes that are cut into equal parts.



5- Write the fraction that represents the shaded part.

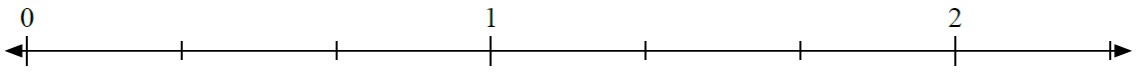


_____



_____

6- Mark the location of $\frac{1}{3}$ on the number line.



MATH - ENGLISH
Learning Activities
CYCLE 2 - GRADE 4
Week 4

Division and fractions

1- Complete with the appropriate number.

$35 = 5 \times \ldots$ $\quad 35 \div 5 = \cdots$

$56 = 7 \times \ldots$ $\quad 56 \div 7 = \cdots$

$81 = 9 \times \ldots$ $\quad 81 \div 9 = \cdots$

$48 = 8 \times \ldots$ $\quad 48 \div 8 = \cdots$

2- Calculate.

$12 \div 4 = \cdots$ $\quad 72 \div 9 = \cdots$

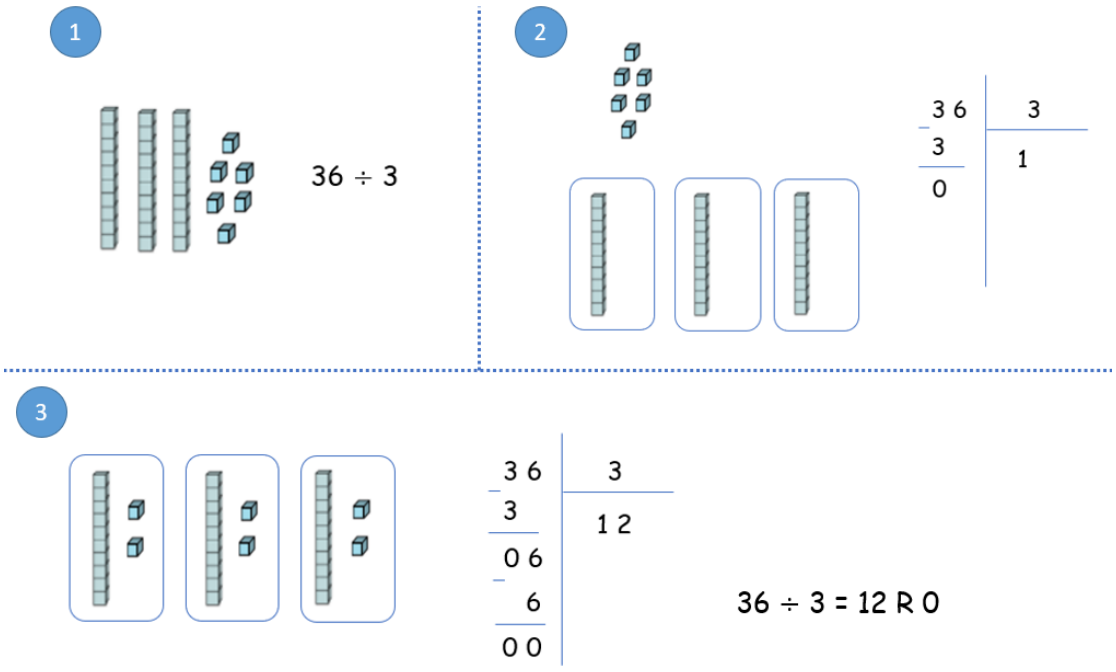
$25 \div 5 = \cdots$ $\quad 28 \div 7 = \cdots$

3- Complete with the appropriate number.

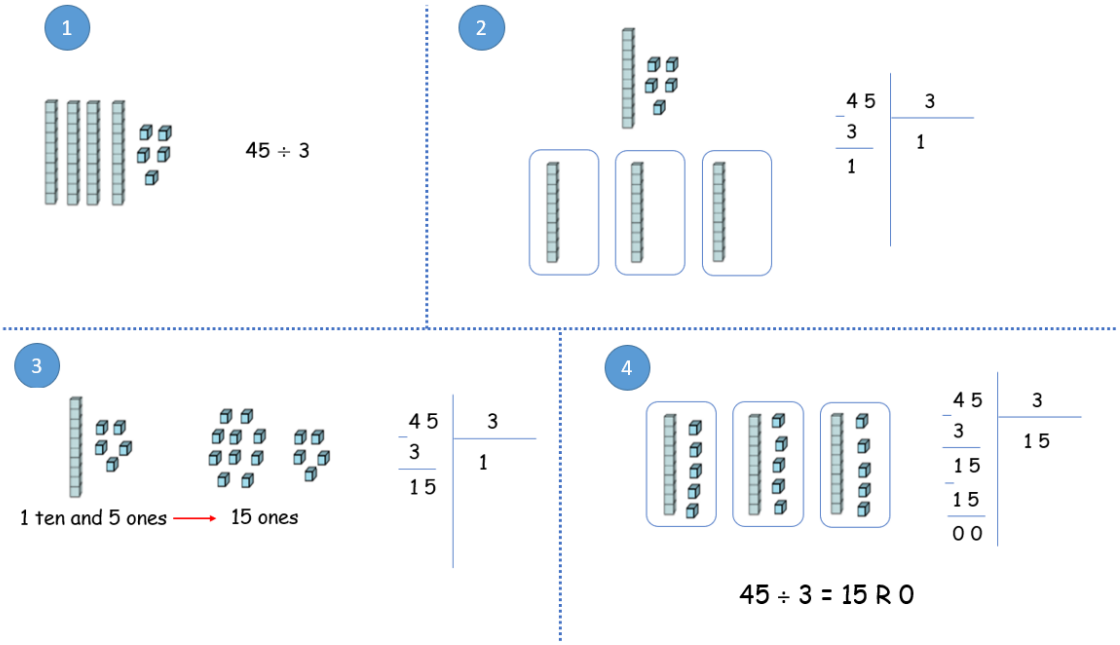
$18 \div \ldots = 3$ $\quad 80 \div \ldots = 8$

$\ldots \div 3 = 9$ $\quad \ldots \div 9 = 6$

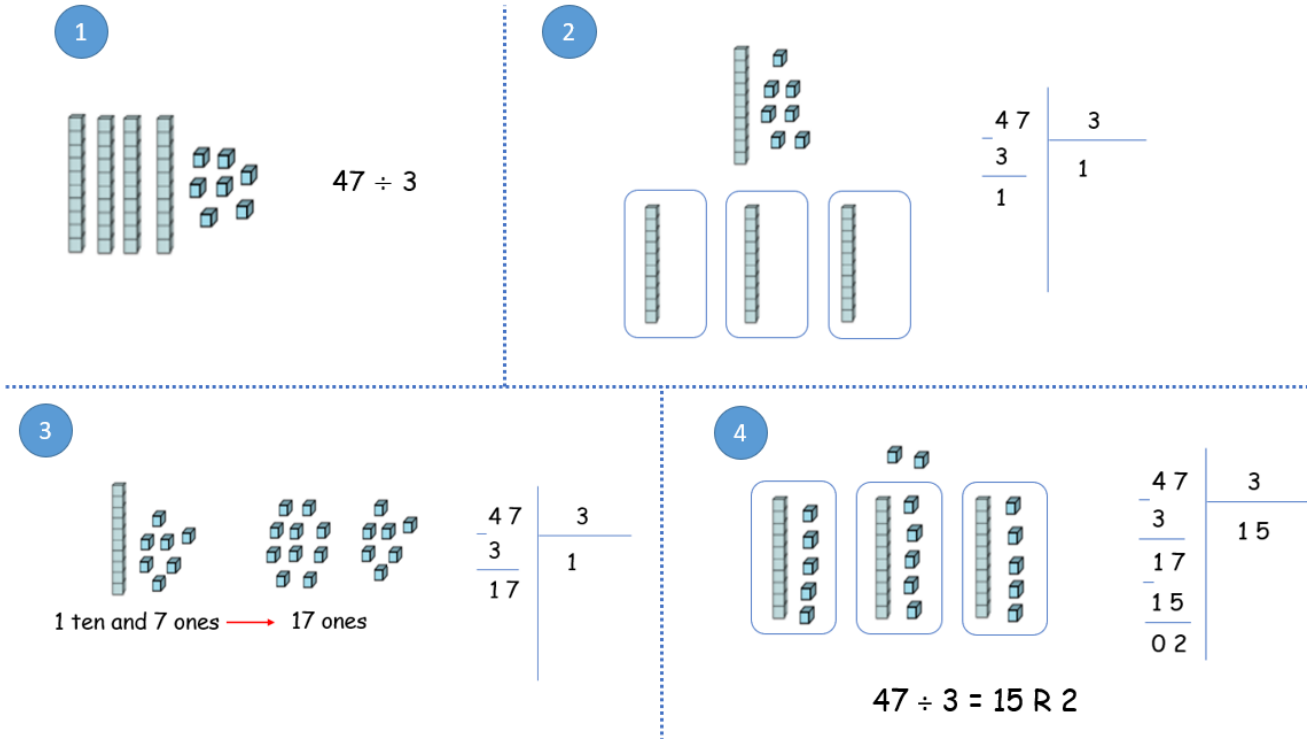
Example 1



Example 2



Example 3



4- Perform the following divisions.

48 | 2

56 | 5

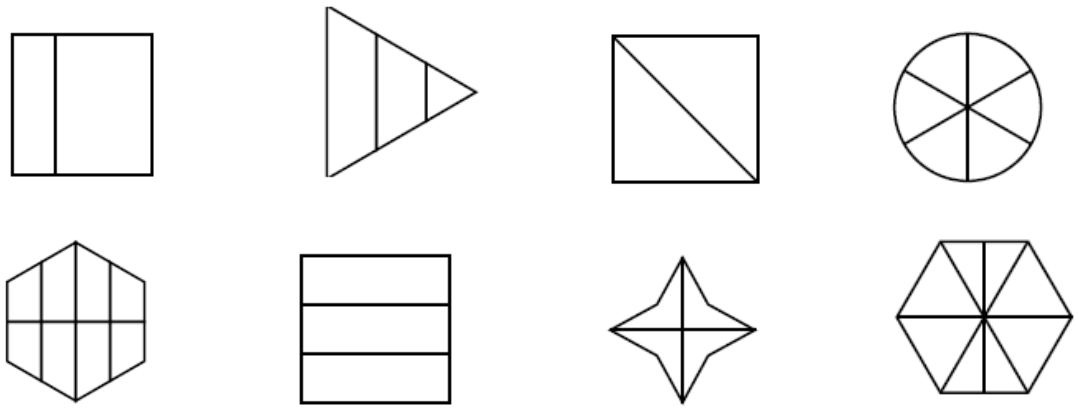
97 | 6

86 | 6

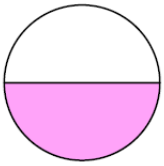
456 | 4

5863 | 3

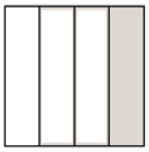
5- Circle the shapes that are cut into equal parts.



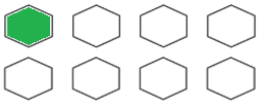
6- Write the fraction that represents the shaded part.



_____

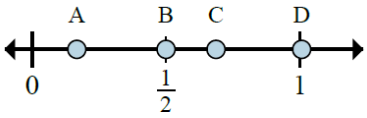


_____

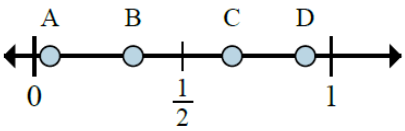


_____

7- Determine which letter better shows the location of the fraction in each case.



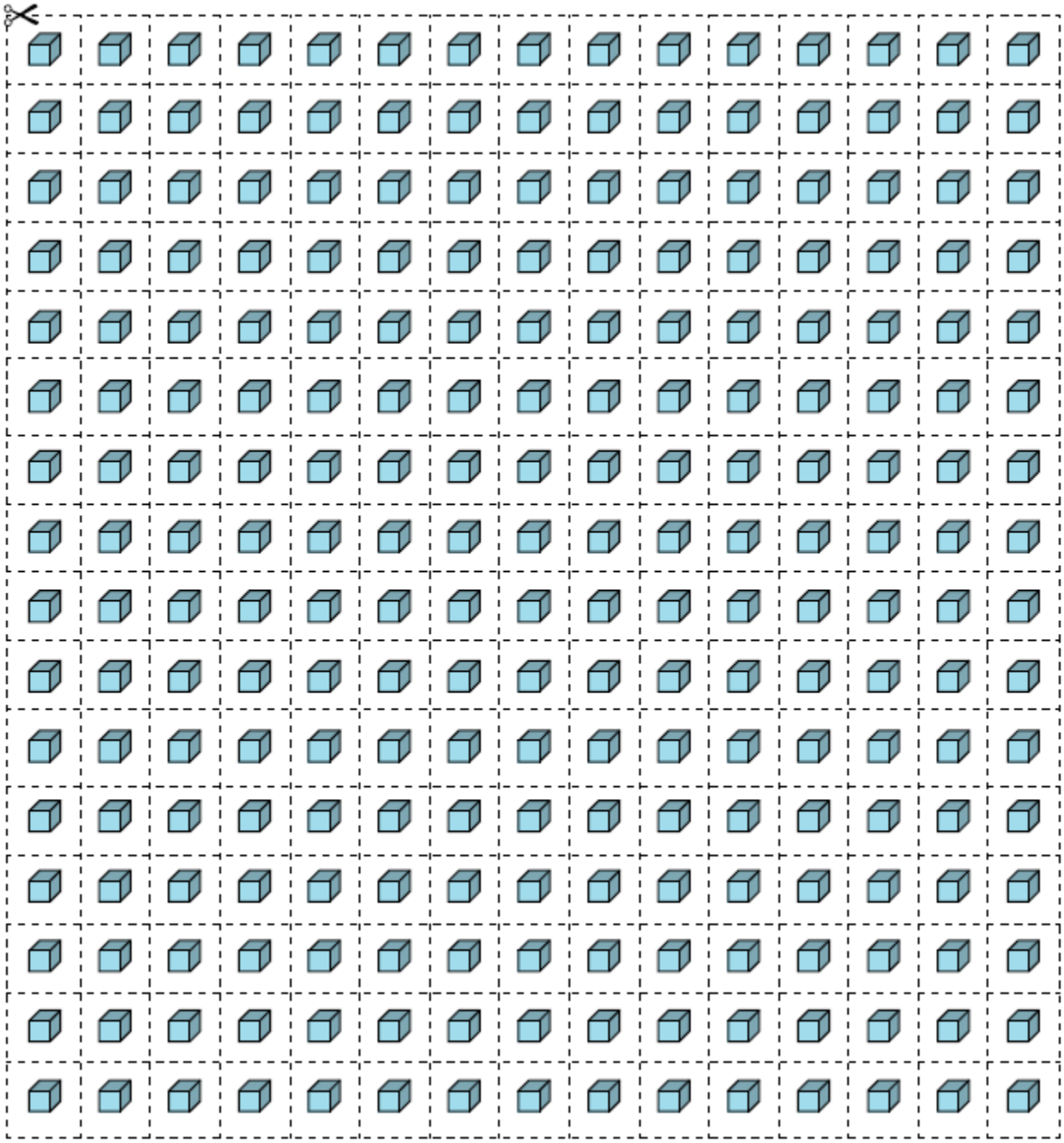
Which letter better shows $\frac{1}{6}$? _____

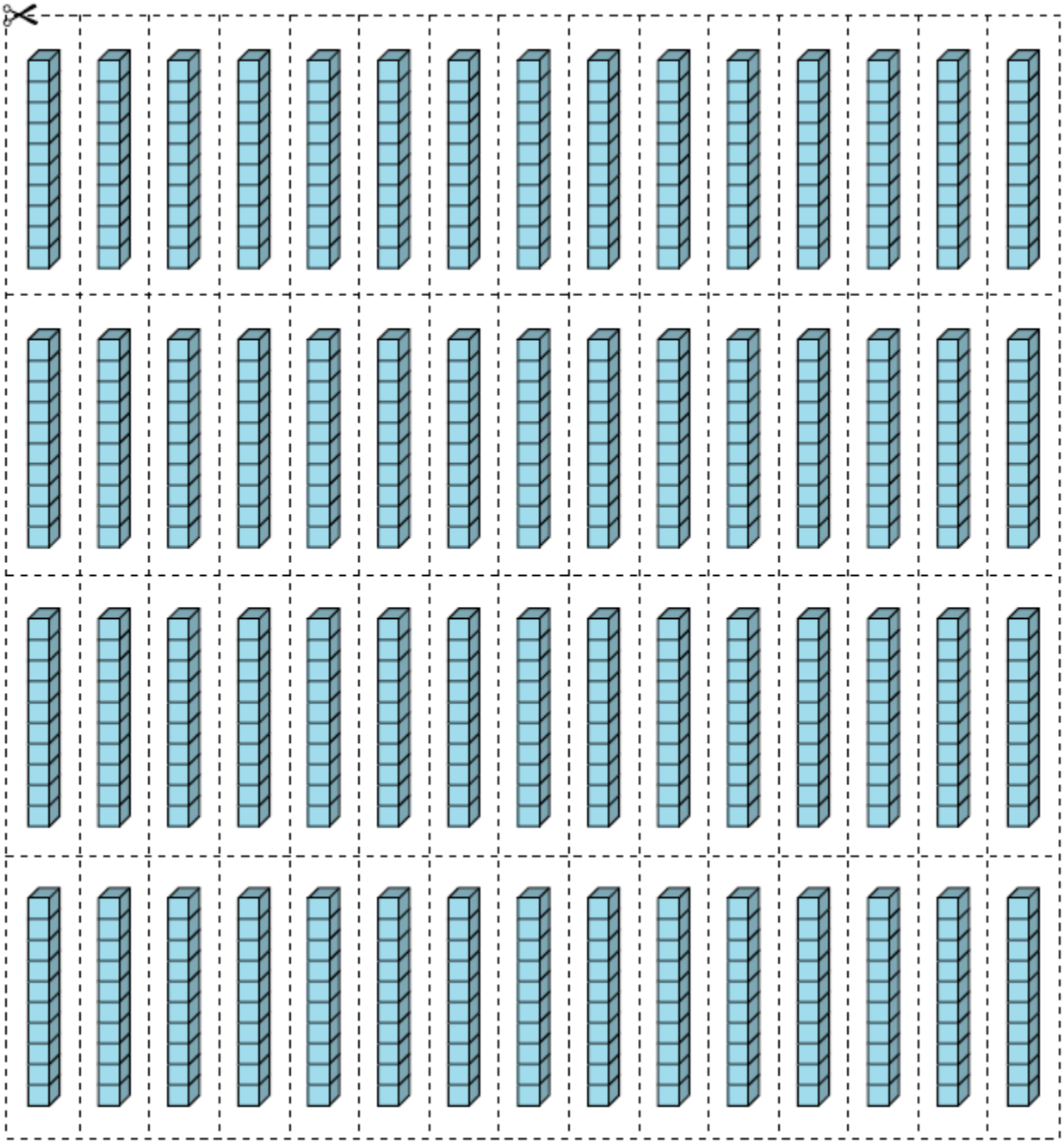


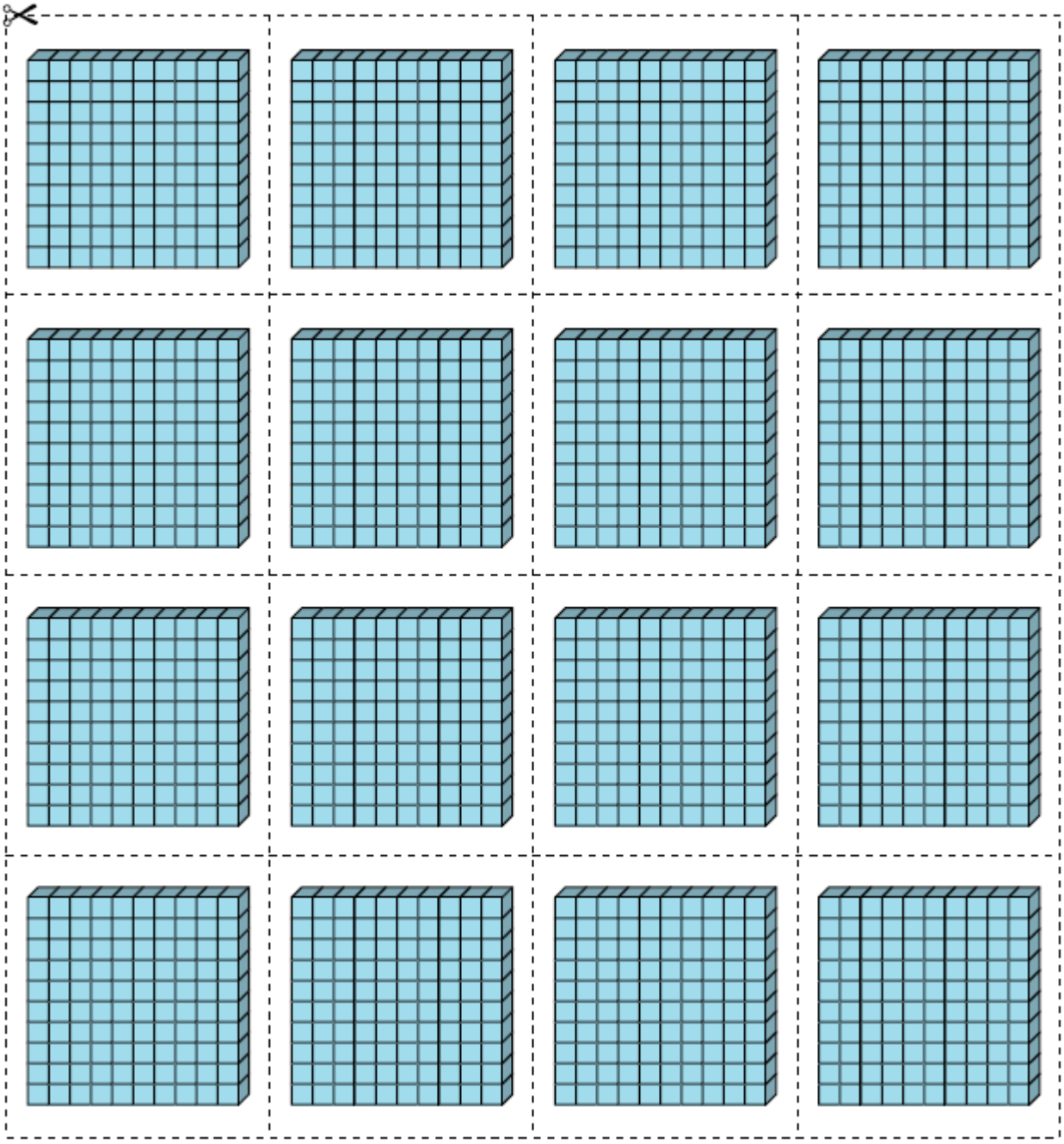
Which letter better shows $\frac{1}{3}$? _____

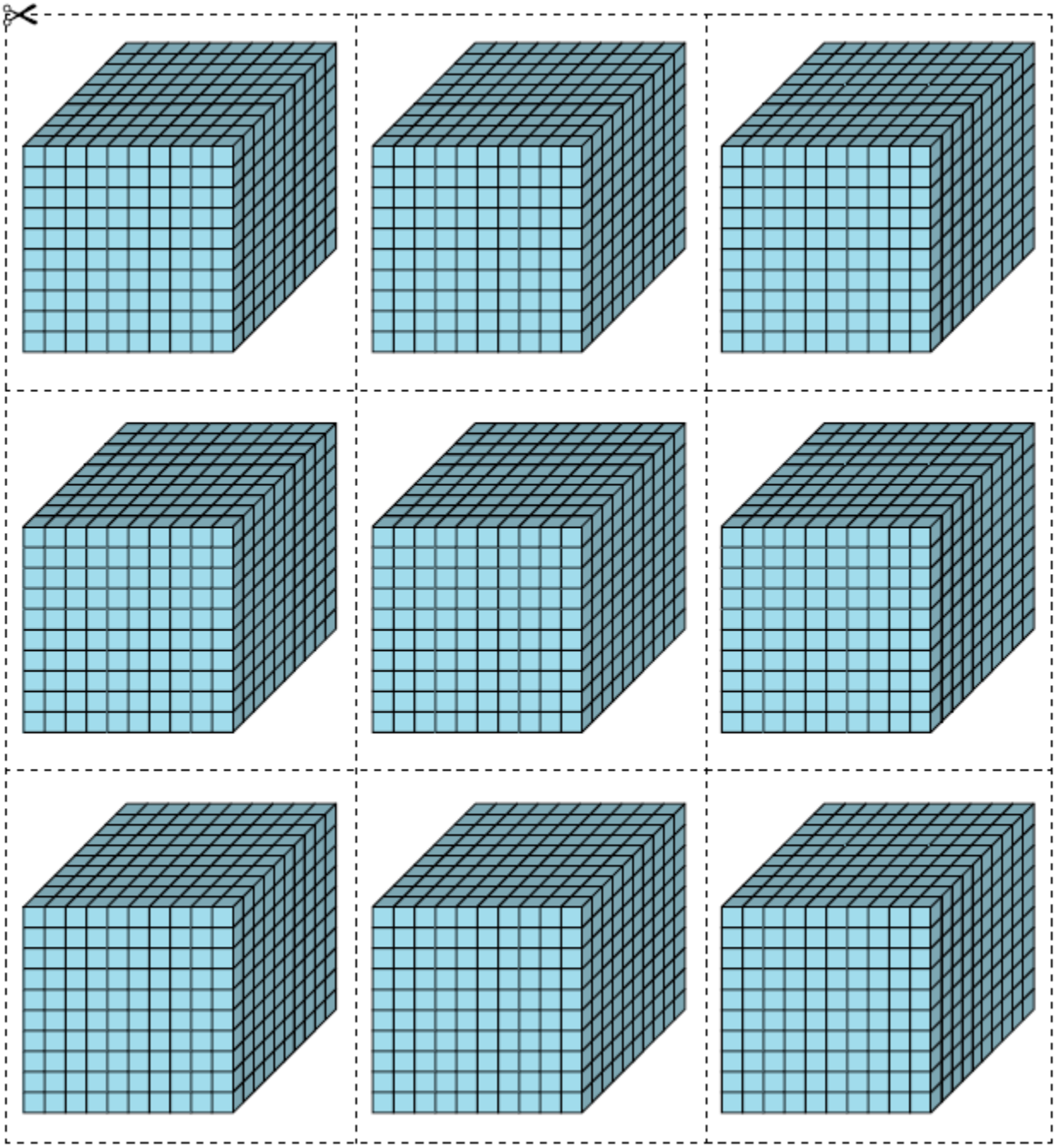
MATH - ENGLISH
Material to be used
CYCLE 2 - GRADE 4

Thousands blocks, Hundreds flats, Tens rods and Ones cubes

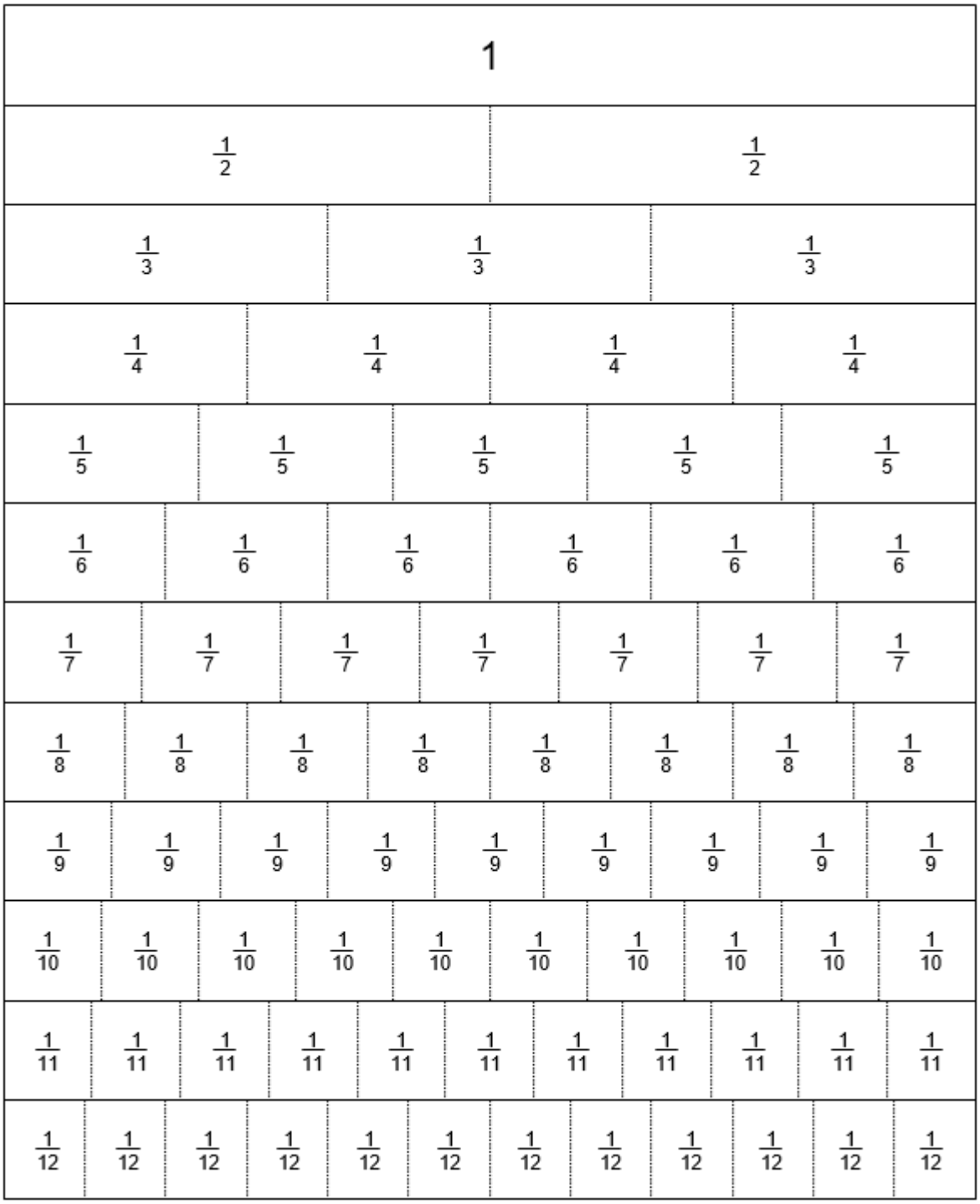




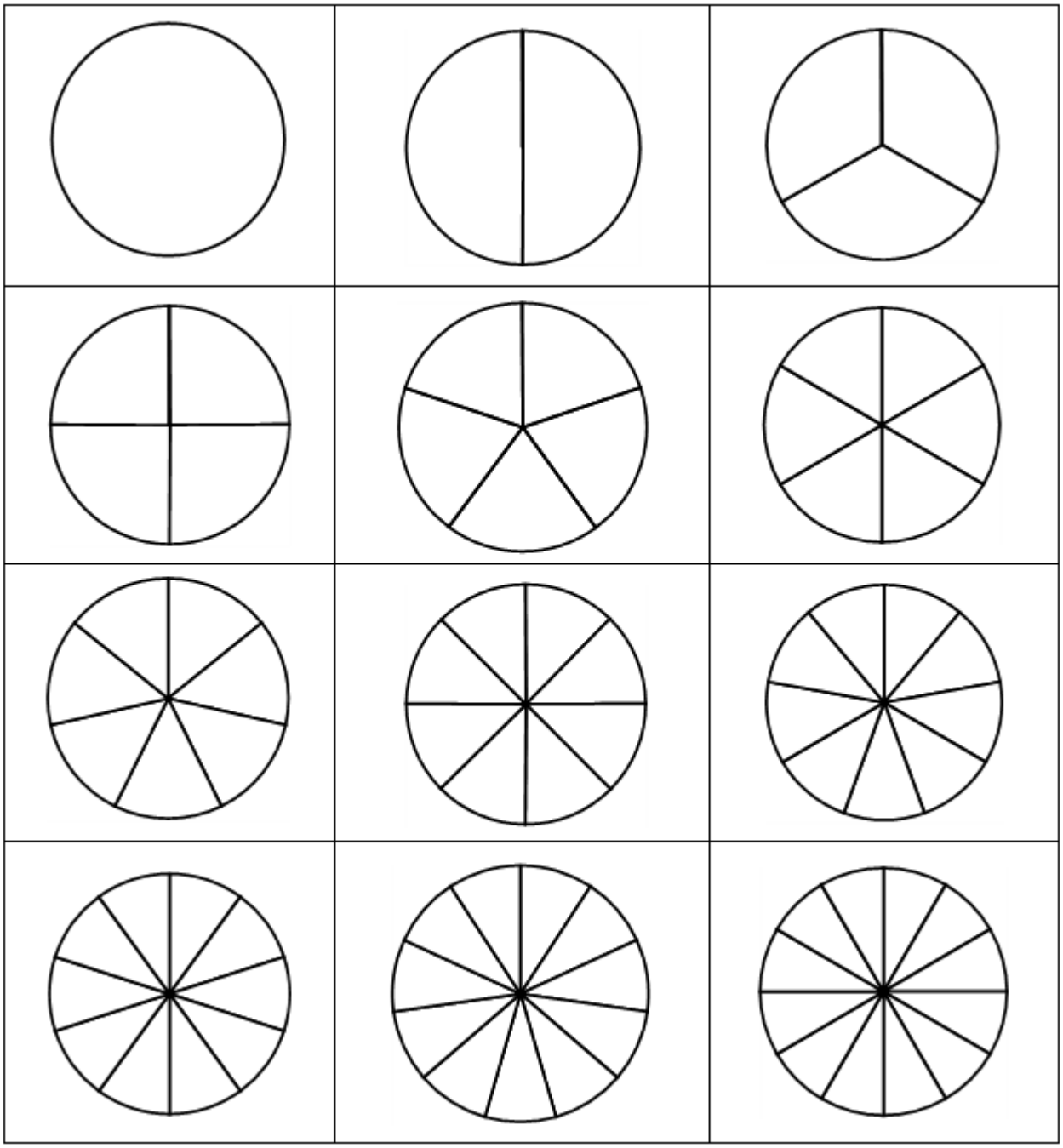




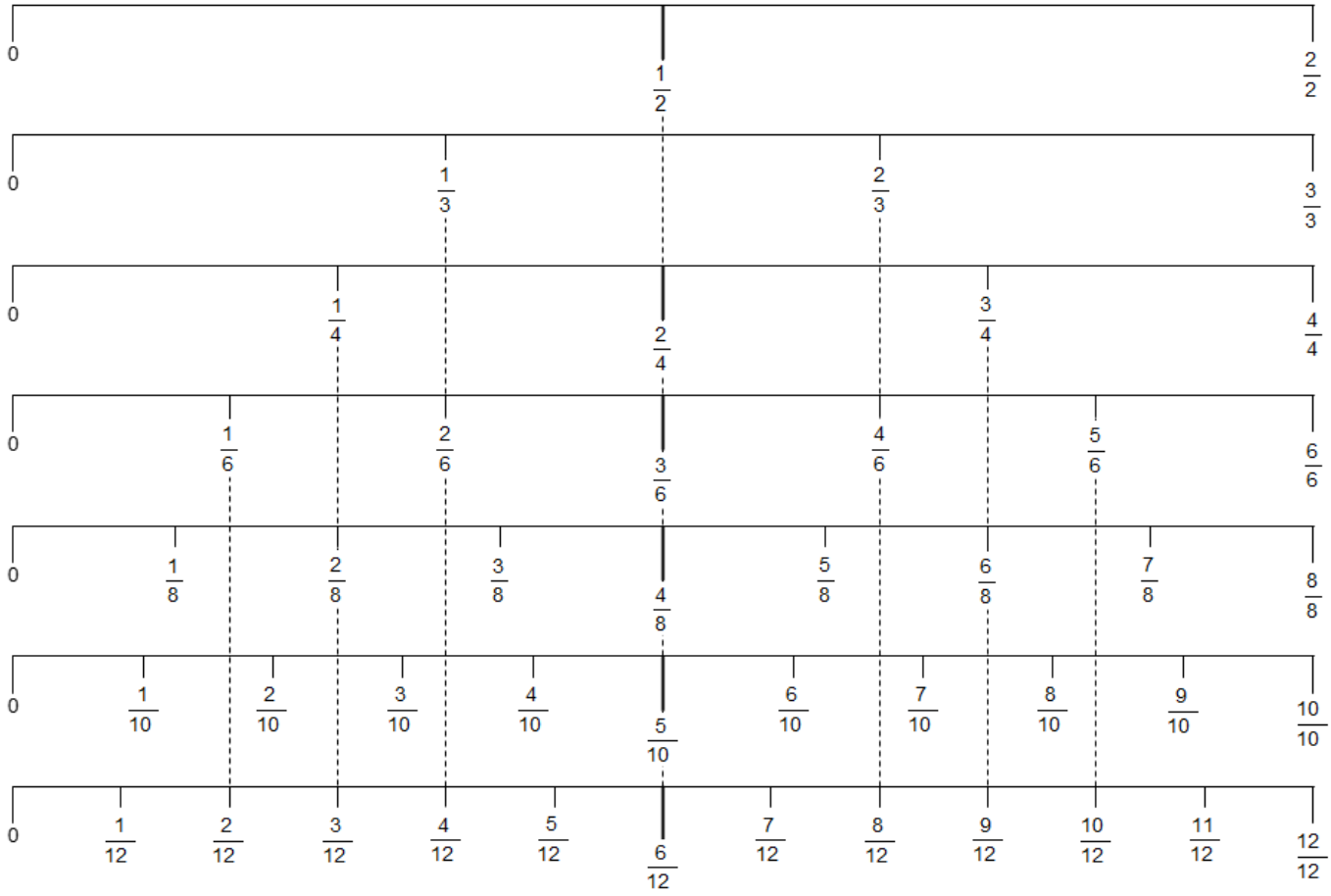
Fraction strips (to twelfths labelled)



Fraction circles (to twelfths unlabeled)



Fraction number lines



Multiplication Chart (missing numbers)

X	10	8	6	2	7	4	3	5	1	9
1	10		6		7	4	3	5		9
2		16		4	14	8			10	18
3		24			21	12	9	15	3	27
4	40		24		28	16	12		4	
5	50	40	30	10		20	15	25	5	45
6	60	48		12	42		18		6	54
7	70			14	49	28	21		7	63
8	80		48	16	56			40	8	
9		72		18		36				81
10	100	80	60			40	30		10	90

THANK YOU

USAID-funded program, managed by World Learning Inc.
Quality Instruction Towards Access and Basic *Education* Improvement (QITABI 2): 2nd floor, Azar Building (ID Design bldg), Sin El Fil, Lebanon, Tel: +961-1-511552/3