Eureka Math

3rd Grade
Module 1
Lesson 19

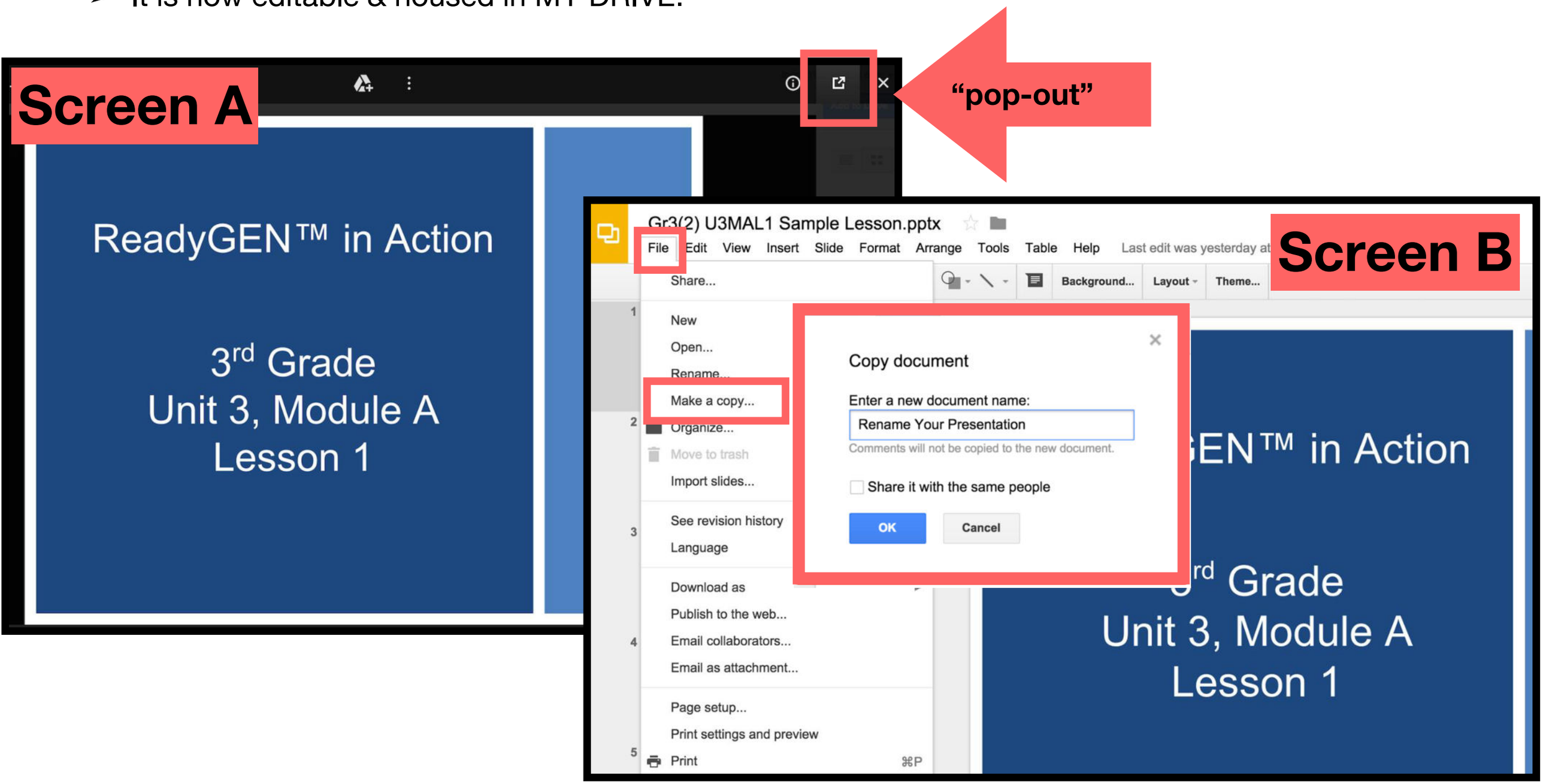
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- ➢ When the Google Slides presentation is opened, it will look like Screen A.
- ➢ Click on the “pop-out” button in the upper right hand corner to change the view.
- ➢ The view now looks like Screen B.
- ➢ Within Google Slides (not Chrome), choose FILE.
- ➢ Choose MAKE A COPY and rename your presentation.
- ➢ Google Slides will open your renamed presentation.
- ➢ It is now editable & housed in MY DRIVE.

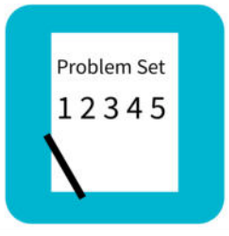


Icons

Read, Draw, Write

Learning Target

Personal White Board

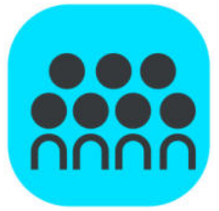


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

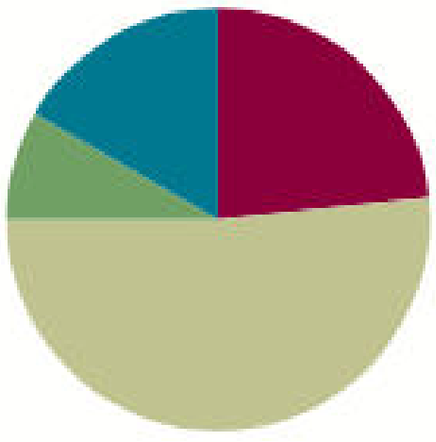
Small Group Time

Lesson 19

Objective: Apply the distributive property to decompose units.

Suggested Lesson Structure

Fluency Practice	(14 minutes)
Application Problem	(5 minutes)
Concept Development	(31 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can apply the distributive property to decompose units.

Group Counting

Let’s count by **fives**.

Count up

Count down

Group Counting

Let’s count by **fours**.

Count up

Count down

Group Counting

Let’s count by **threes**.

Count up

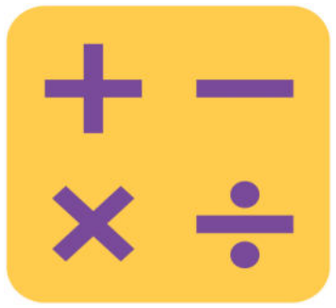
Count down

Group Counting

Let’s count by **sixes**.

Count up

Count down



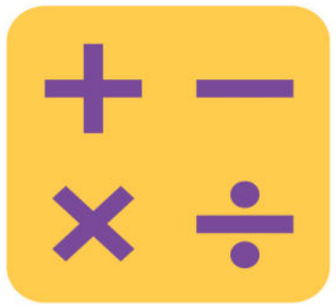
Commutative Multiplication

3 x 2 = ____

Say the multiplication sentence.

Flip it.

2 x 3 = ____



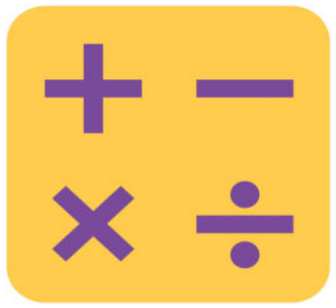
Commutative Multiplication

5 x 2 = ____

Say the multiplication sentence.

Flip it.

2 x 5 = ____



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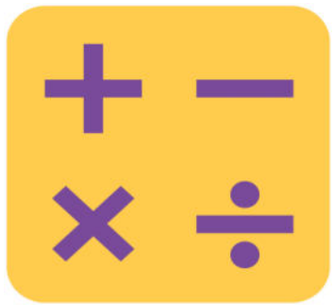
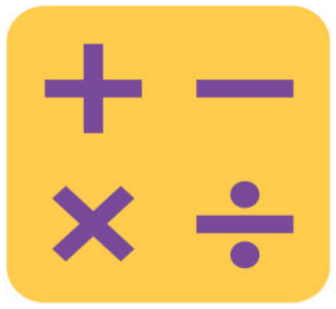


Decompose and Multiply

7 x 4 = ____

Rewrite the equation in unit form.



Decompose and Multiply

7 fours = (5 fours) + (___ fours) = ____ fours

7 fours is the same as 5 fours and how many fours?

Decompose and Multiply

(5 fours) + (2 fours) = ____

20 + ____ = _____

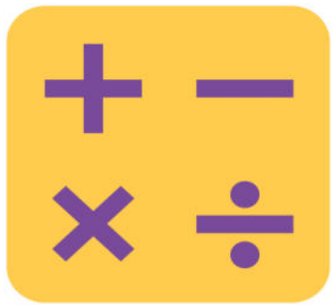
7 x 4 = _____ equals?

7 × 4 = ___

7 fours = (5 fours) + (___ fours) = ___

(5 fours) + (2 fours) = ___

20 + ___ = ___



Compose and Multiply

(5 x 3) + (2 x 3) = ____ Fill in the blank to write a true multiplication sentence on your personal white board. Below the multiplication sentence, write an addition sentence.

15 + 6 = ____

Write (5 x 3) + (2 x 3) as a single multiplication sentence.

Application Problem

Henrietta works in a shoe store. She uses 2 shoelaces to lace each pair of shoes. She has a total of 24 laces. How many pairs of shoes can Henrietta lace?

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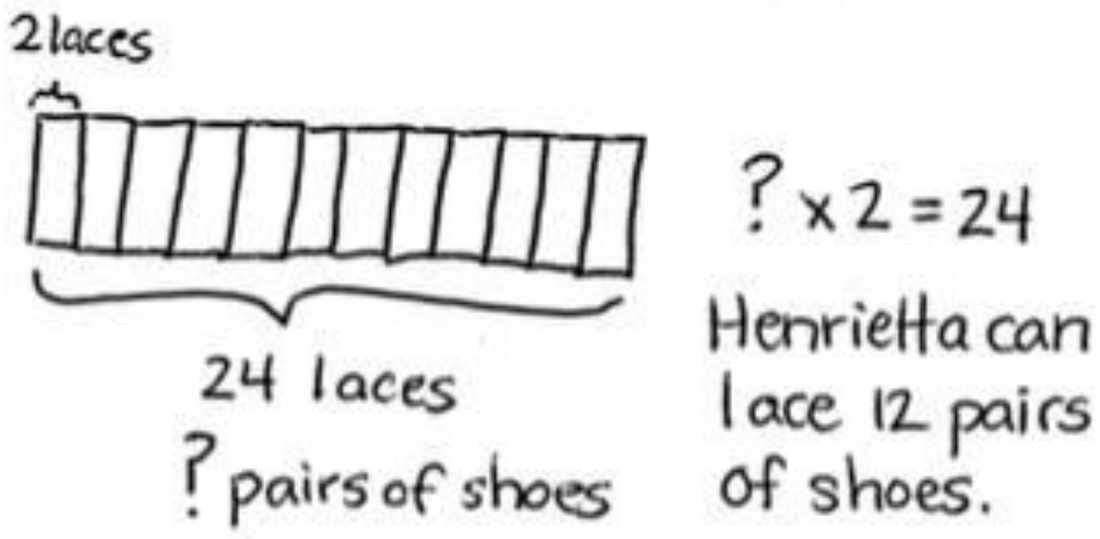
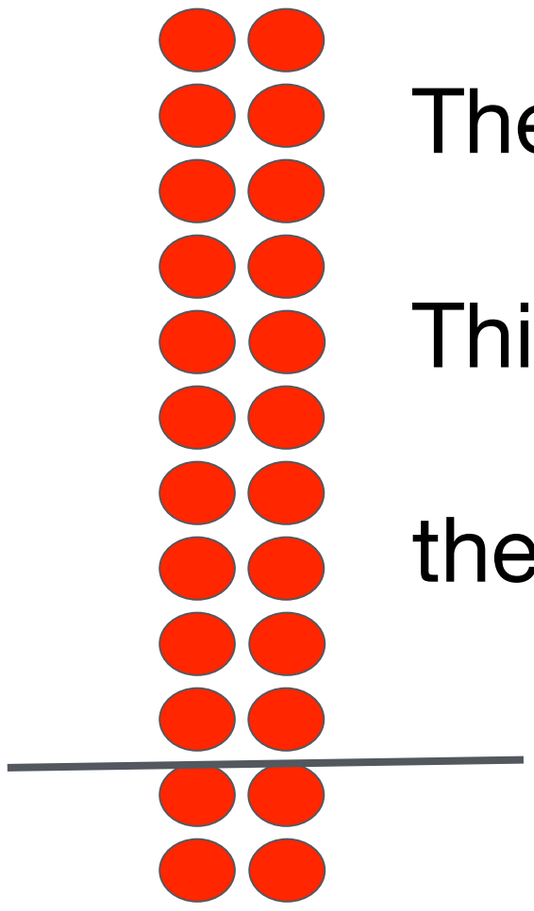


RDW

Break Apart and Distribute

Let's use the array to help us solve 24 ÷ 2 = _____



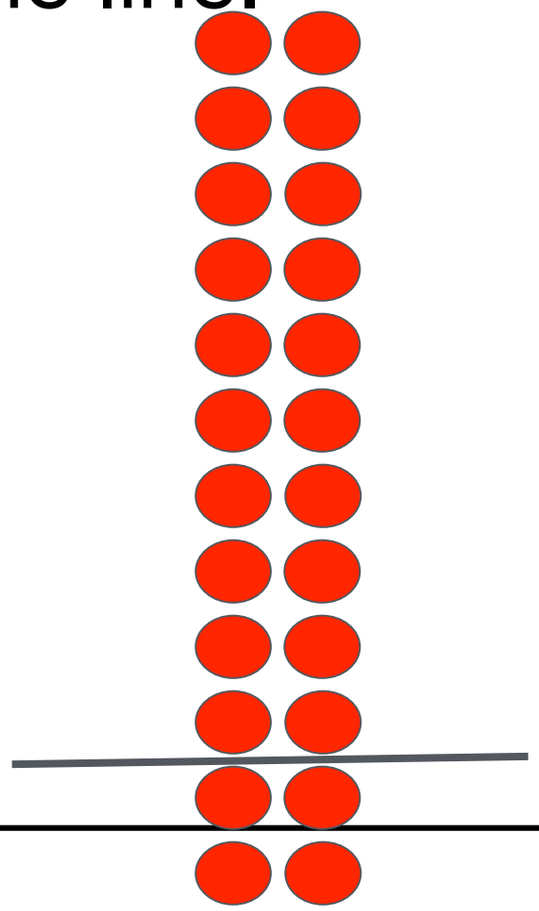
There are a 24 dots total.

This shows one way to break apart

the array.

Break Apart and Distribute

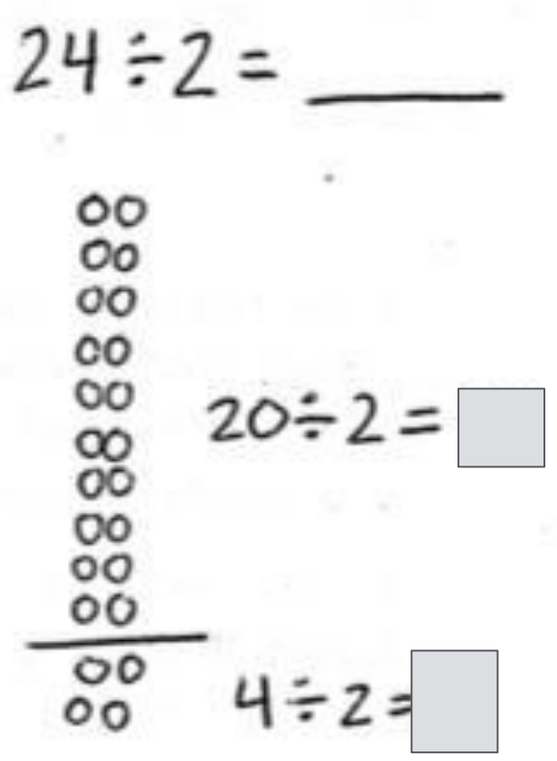
Write division equations to represent the part of the array above the line and the part of the array below the line.



Break Apart and Distribute

How many twos are above the line?

How many twos are below the line?



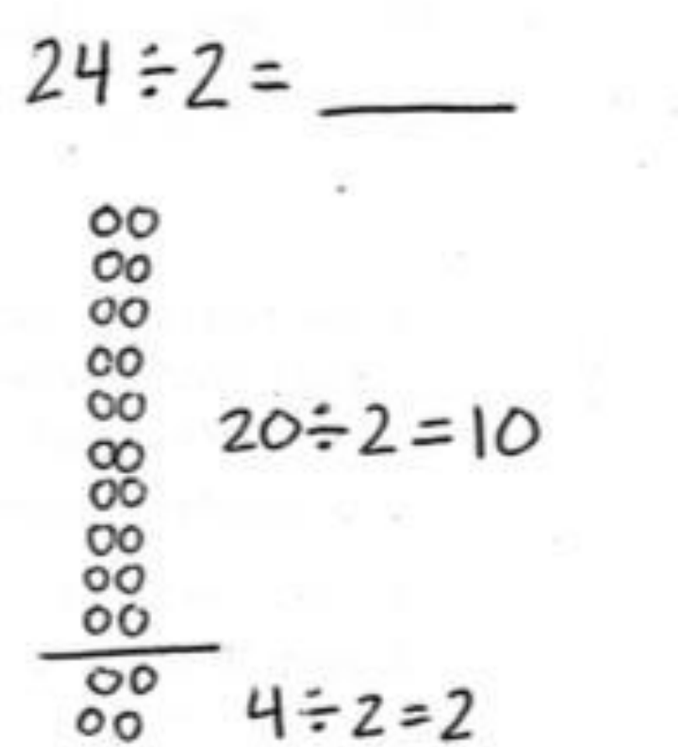
Break Apart and Distribute

Let's rewrite this as the addition of two quotients. Use my equations.

(____ ÷ 2) + (____ ÷ 2) = ____ ÷ 2

____ + ____ = ____

Explain to your partner the process we used to solved 24 ÷ 2.



Break Apart and Distribute

27 ÷ 3 = ____

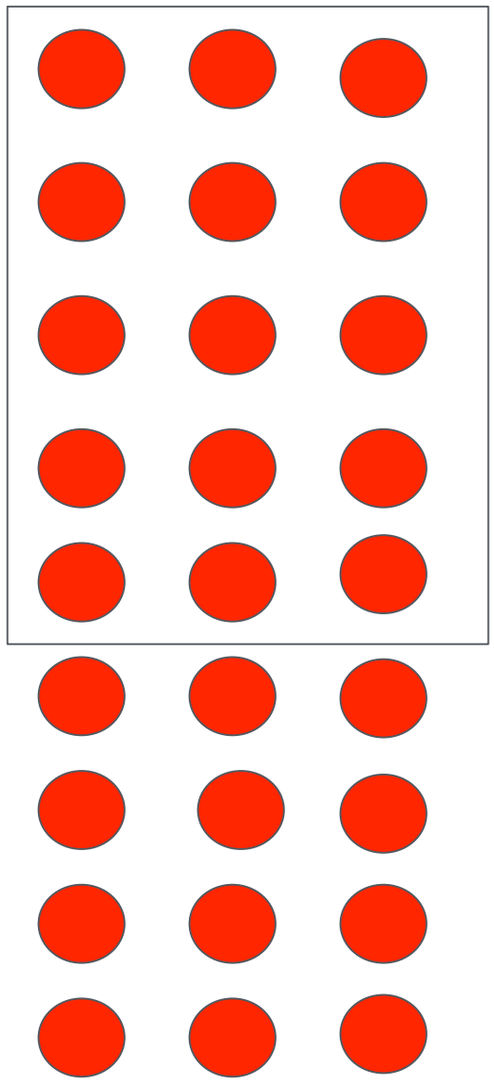
What are we focused on when we break apart and divide? Breaking up the number of groups (rows), in like multiplication, or breaking up the total?

Let's break up 27 into 15 and another number. Fifteen plus what equals 27?

Work with a partner to draw an array that shows 27 ÷ 3 where 3 is the number of columns.

Break Apart and Distribute

27 ÷ 3 = ____



Break Apart and Distribute

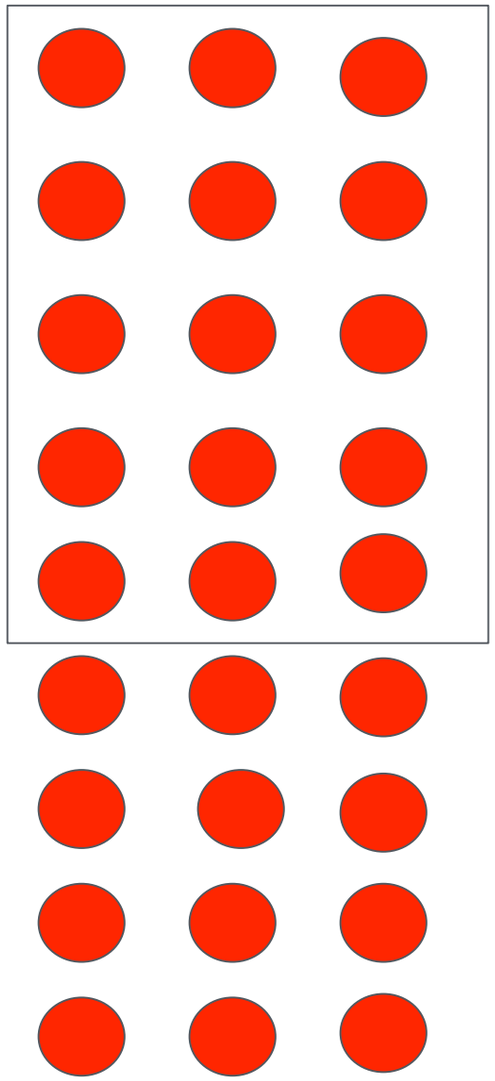
27 ÷ 3 = ____

Box the part of the array that shows the total of 15.

Write a division equation for the boxed portion to the right of the array.

Break Apart and Distribute

27 ÷ 3 = ____



15 ÷ 3 = 15

Break Apart and Distribute

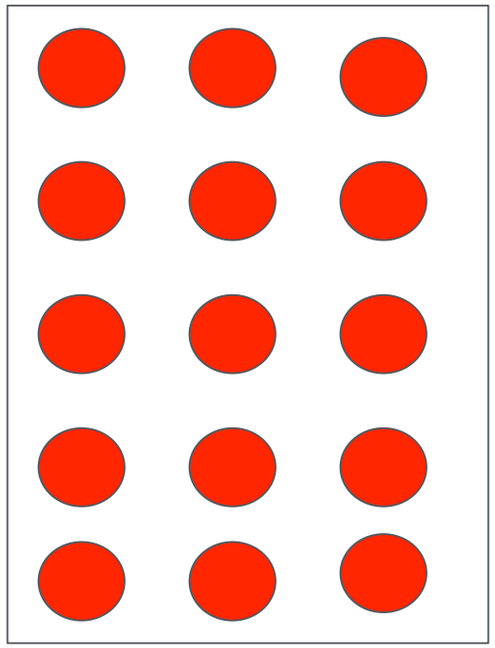
27 ÷ 3 = ____

Now, box the part of the array that shows the total of 12.

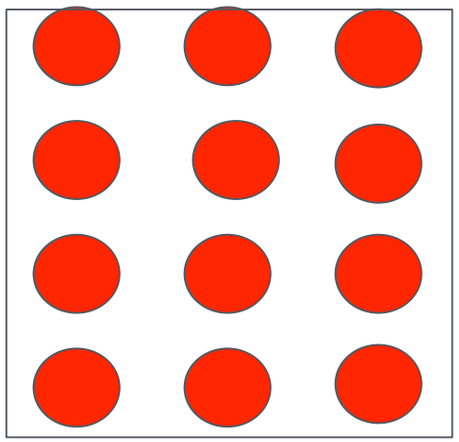
Write a division equation for the boxed portion to the right of the array.

Break Apart and Distribute

27 ÷ 3 = ____



15 ÷ 3 = 5



12 ÷ 3 = 4

Break Apart and Distribute

$15 \div 3 = 5$ $12 \div 3 = 4$

Tell your partner how you will use the equations to help you solve the original equation $27 \div 3 =$ ____

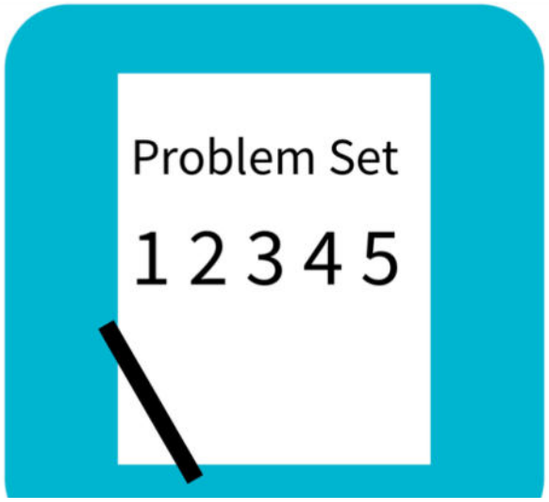
Break Apart and Distribute

Complete the following sequence to solve the original equation 27 ÷ 3 = ____ with a partner.

$27 \div 3 = (15 \div 3) + (12 \div 3)$

$= \_\_\_\_\_ + \_\_\_\_\_$

$= \_\_\_\_\_$

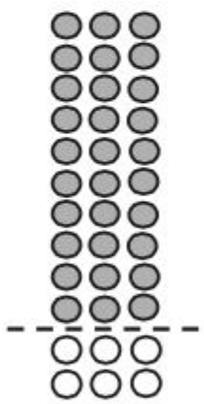


Problem Set

Name _____ Date _____

1. Label the array. Then, fill in the blanks to make true number sentences.

a. 36 ÷ 3 = _____



(30 ÷ 3) = _____

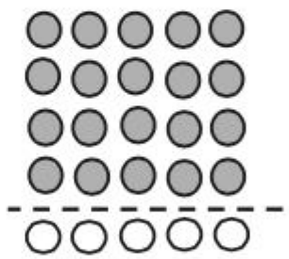
(6 ÷ 3) = _____

(36 ÷ 3) = (30 ÷ 3) + (6 ÷ 3)

= 10 + _____

= 12

b. 25 ÷ 5 = _____



(20 ÷ 5) = 4

(5 ÷ 5) = _____

(25 ÷ 5) = (20 ÷ 5) + (5 ÷ 5)

= 4 + _____

= _____

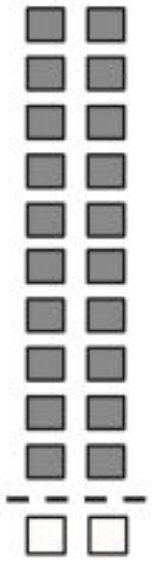
Debrief

- Compare Nell's strategy in Problem 3 to the strategy for solving 24 ÷ 2 in the Concept Development.
- Yesterday, we used the break apart and distribute strategy with multiplication. How is the method we learned today similar?
- How is the break apart and distribute strategy different for multiplication than for division? (This strategy works for division when the total is broken into 2 parts that are evenly divisible by the divisor. For example, to solve 33 ÷ 8, decomposing 33 into 25 and 8 is not effective at this level because neither 25 nor 8 is evenly divisible by 3.)

Exit Ticket

Name _____ Date _____

Complete the equations below to solve 22 ÷ 2 = _____.



(20 ÷ 2) = _____

(_____ ÷ 2) = _____

(22 ÷ 2) = (20 ÷ 2) + (_____ ÷ 2)

= _____ + _____

= _____