Eureka Math

2nd Grade
Module 4
Lesson 13

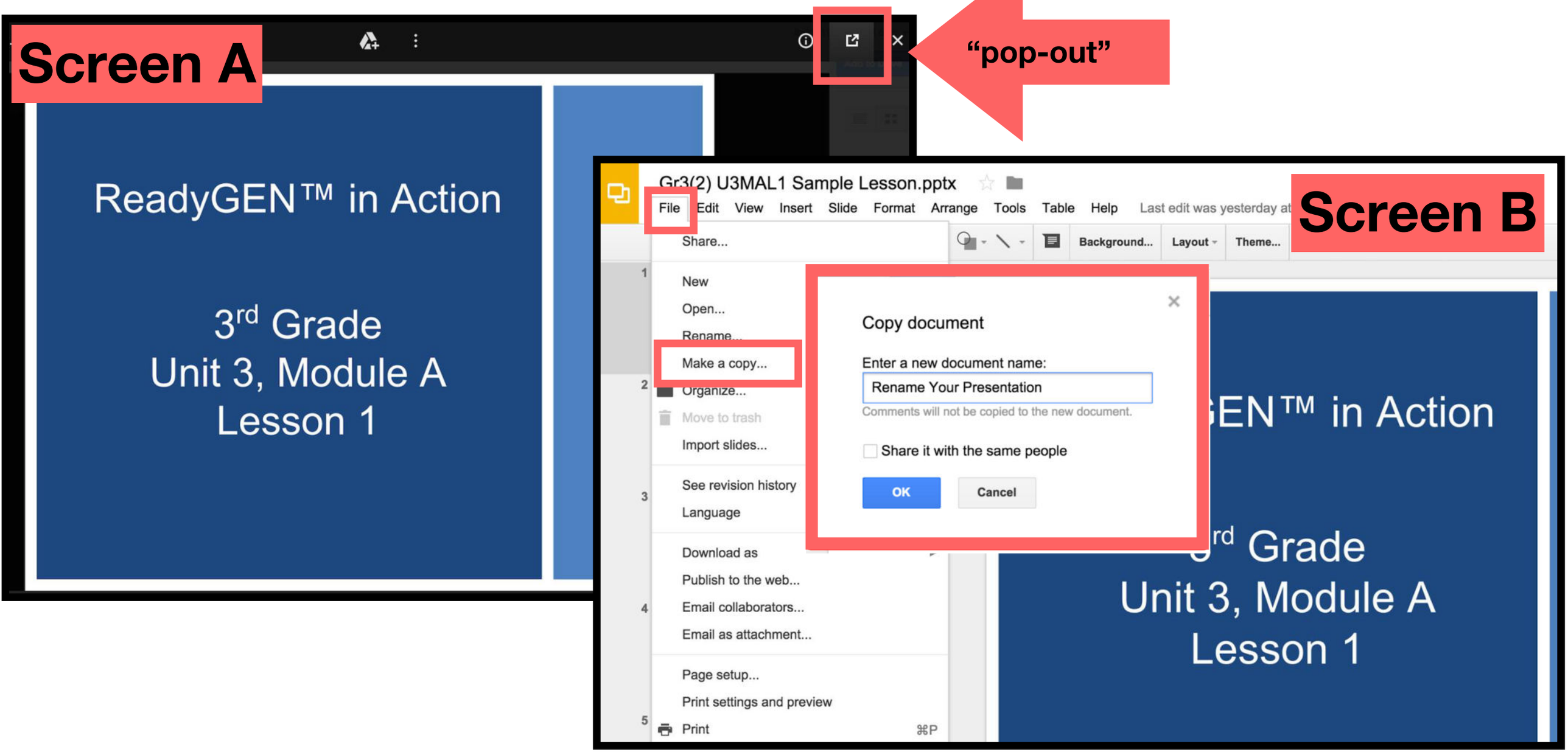
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

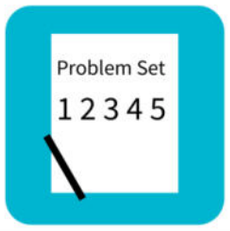


Icons

Read, Draw, Write

Learning Target

Personal White Board

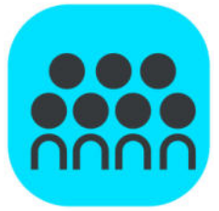


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

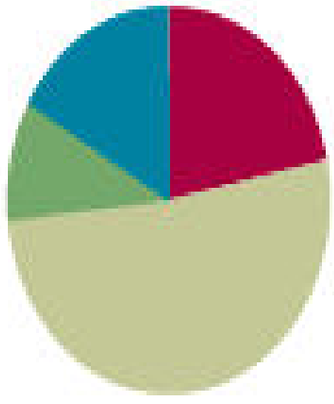
Small Group Time

Lesson 13

Objective: Use math drawings to represent subtraction with and without decomposition and relate drawings to a written method.

Suggested Lesson Structure

Application Problem	(6 minutes)
Fluency Practice	(13 minutes)
Concept Development	(31 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use math drawings to represent subtraction with and without decomposition and relate drawings to a written method.

Materials Needed:

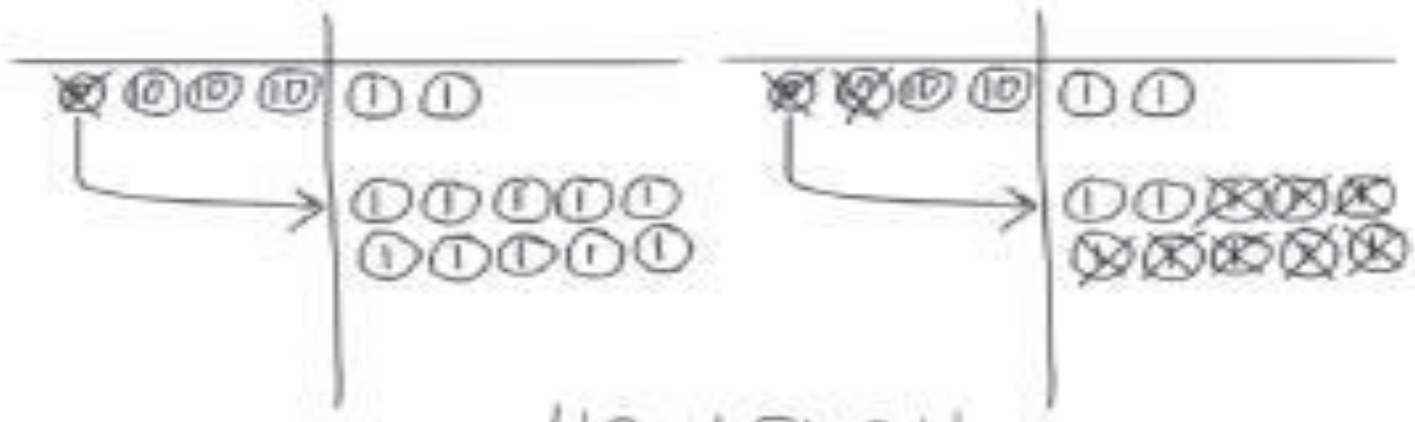
Sprint

Concept Development:

- (S) personal whiteboards

Application problems

Mrs. Beachy went shopping with $42. She spent $18. How much money did she have left?



42-18=24

e

Mrs. Beachy has $24 left.

Subtraction from Tens

I say a basic fact, you add ten to the whole and continue until I say to stop. So, after 10 – 5, you would solve 20 – 5 and then…?

Solve as many as you can on your personal white board before I give the signal to stop. Let's begin. 10 − 5.

Sprint

Number Correct: _____

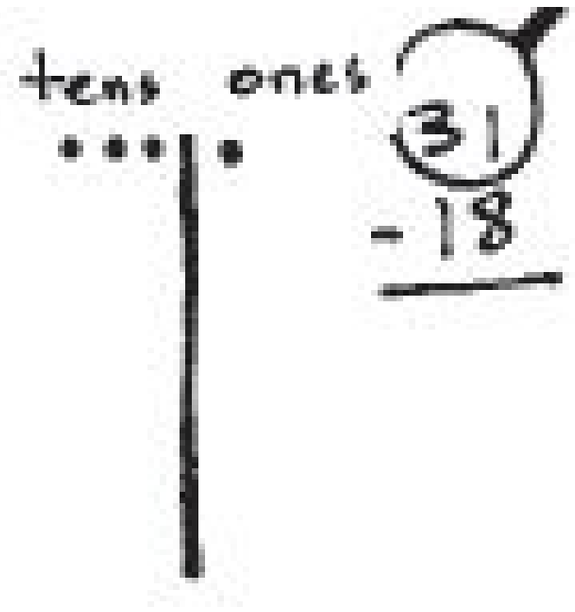
A

Subtraction Patterns

1.	10 – 5 =		23.	14 – 6 =	
2.	20 – 5 =		24.	24 – 6 =	
3.	30 – 5 =		25.	34 – 6 =	
4.	10 – 2 =		26.	15 – 7 =	
5.	20 – 2 =		27.	25 – 7 =	
6.	30 – 2 =		28.	35 – 7 =	
7.	11 – 2 =		29.	11 – 4 =	
8.	21 – 2 =		30.	21 – 4 =	
9.	31 – 2 =		31.	31 – 4 =	
10.	10 – 8 =		32.	12 – 6 =	
11.	11 – 8 =		33.	22 – 6 =	
12.	21 – 8 =		34.	32 – 6 =	

Concept Development

Problem 1: 31 – 18



What is the whole?

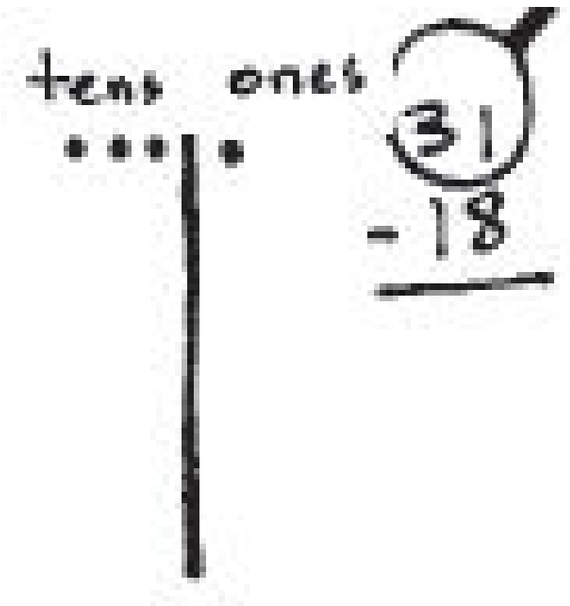
What is the part that we know?

What should we do first?

Today, we're just going to draw a simple chip model with dots, or chips, like we did with addition.

Concept Development

Why do I only draw a value of 31 to solve 31 – 18? Discuss with a partner.



How many tens did I draw on my place value chart? How many ones?
What is the part that we know?

What next?

Can I subtract 8 ones from 1 one?

What should I do?

Concept Development

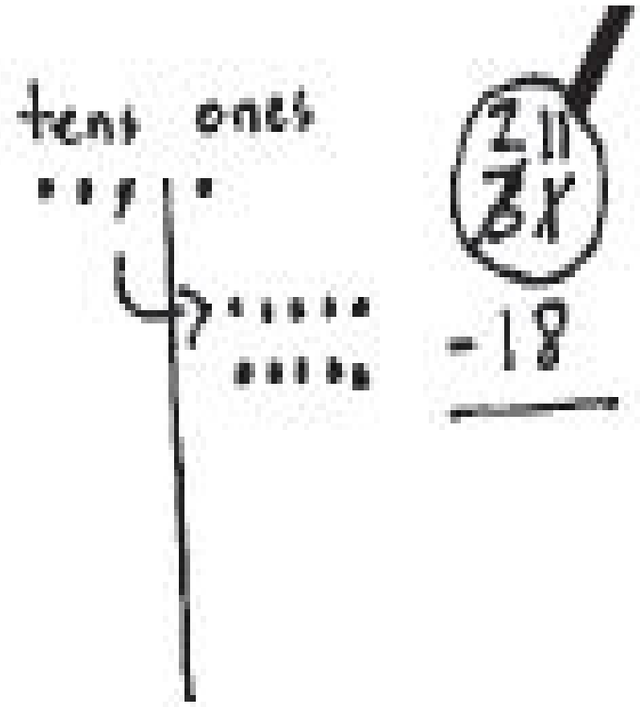
Whatever we do with the chips, we show with vertical form.

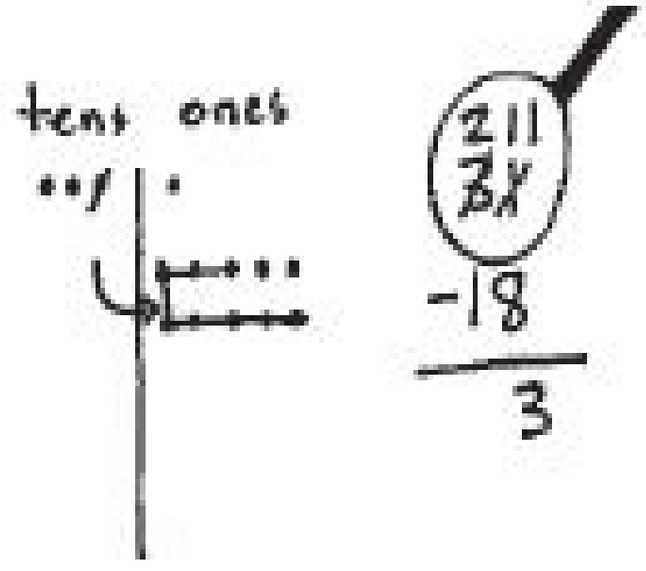
How many tens do I have now?

How many ones do I have now?

Do we also see 2 tens and 11 ones in the chip model?

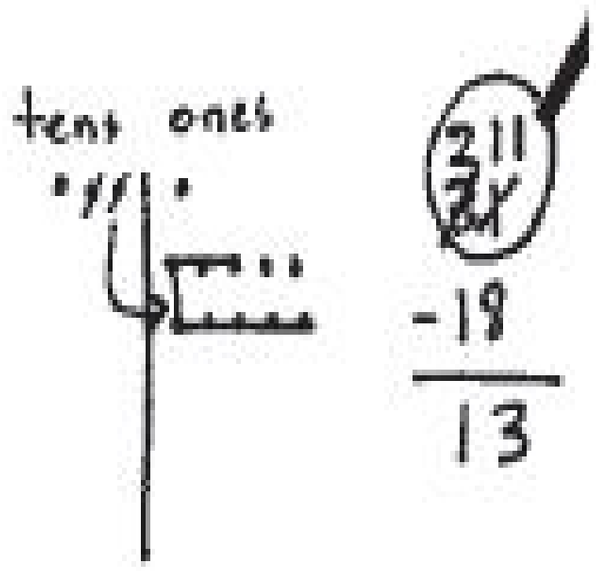
11 ones minus 8 ones is…?

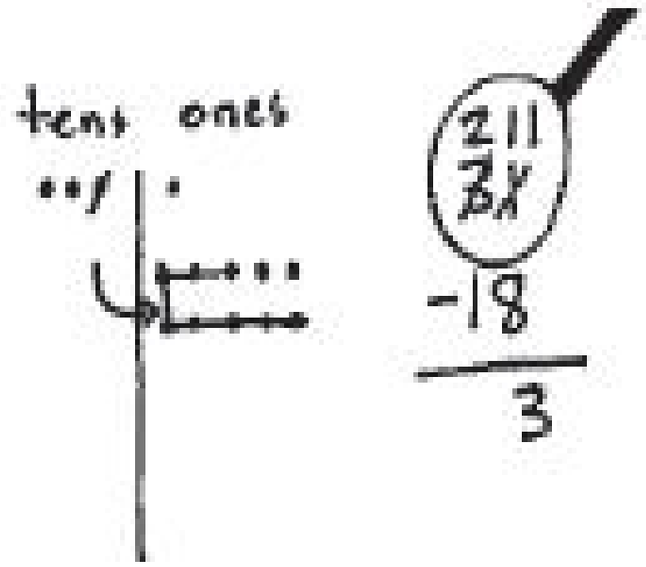




Concept Development

2 tens minus 1 ten is…?





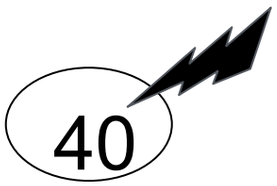
What is the answer?

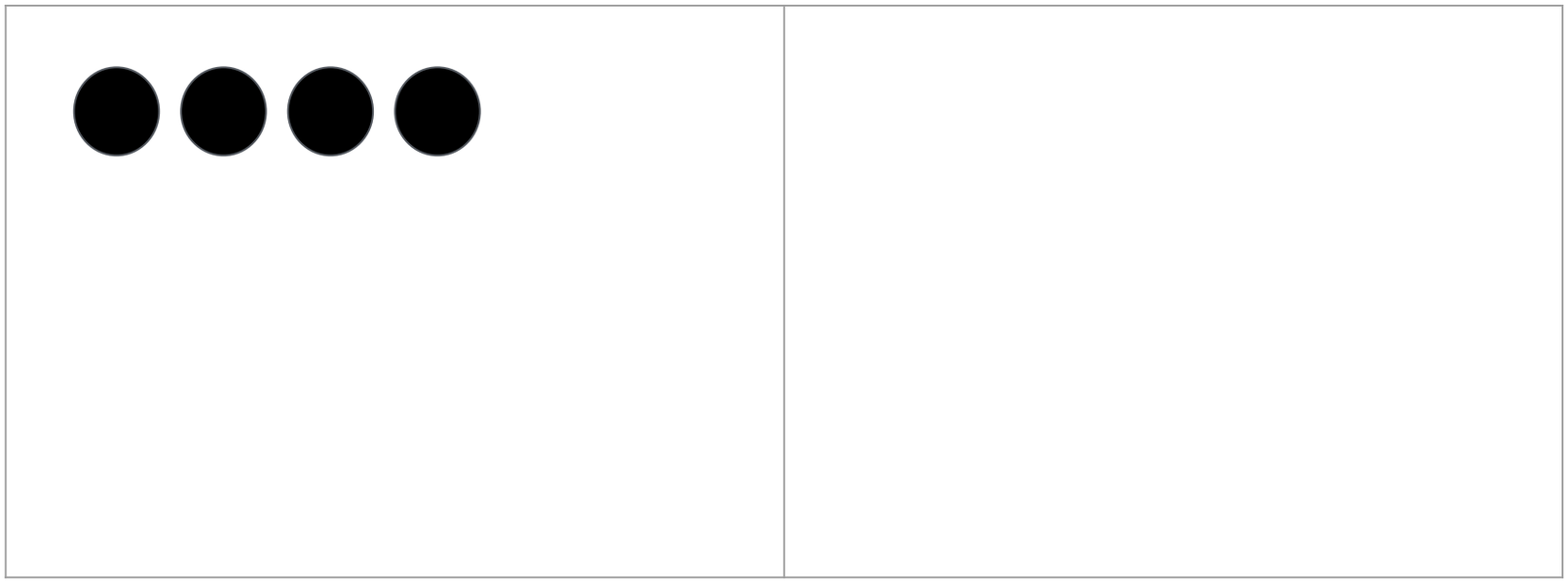
Concept Development

Problem 2:
40 - 24 and 33 - 17

I would like to know, is this true or false? What I write, you write.

40 – 24 = 33 – 17



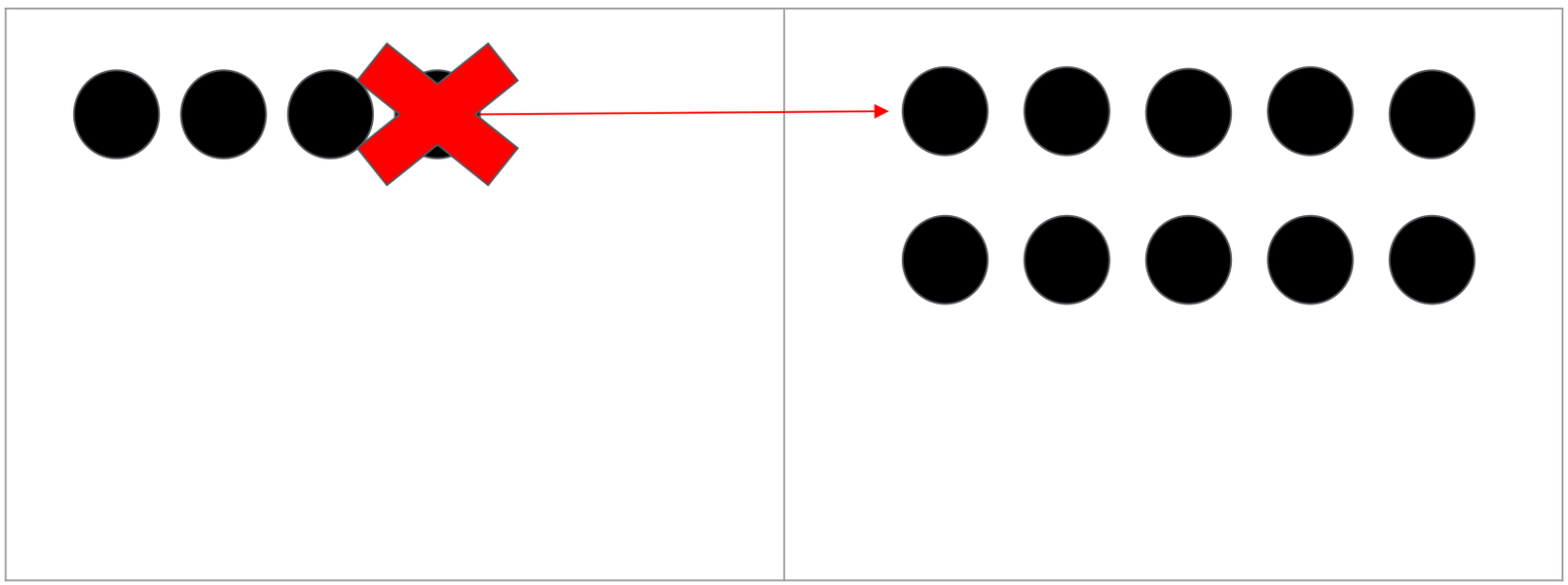


Concept Development

$$\begin{array}{r} 40 \\ -\ 24 \\ \hline \end{array}$$

Can I subtract 4 ones from 0 ones?

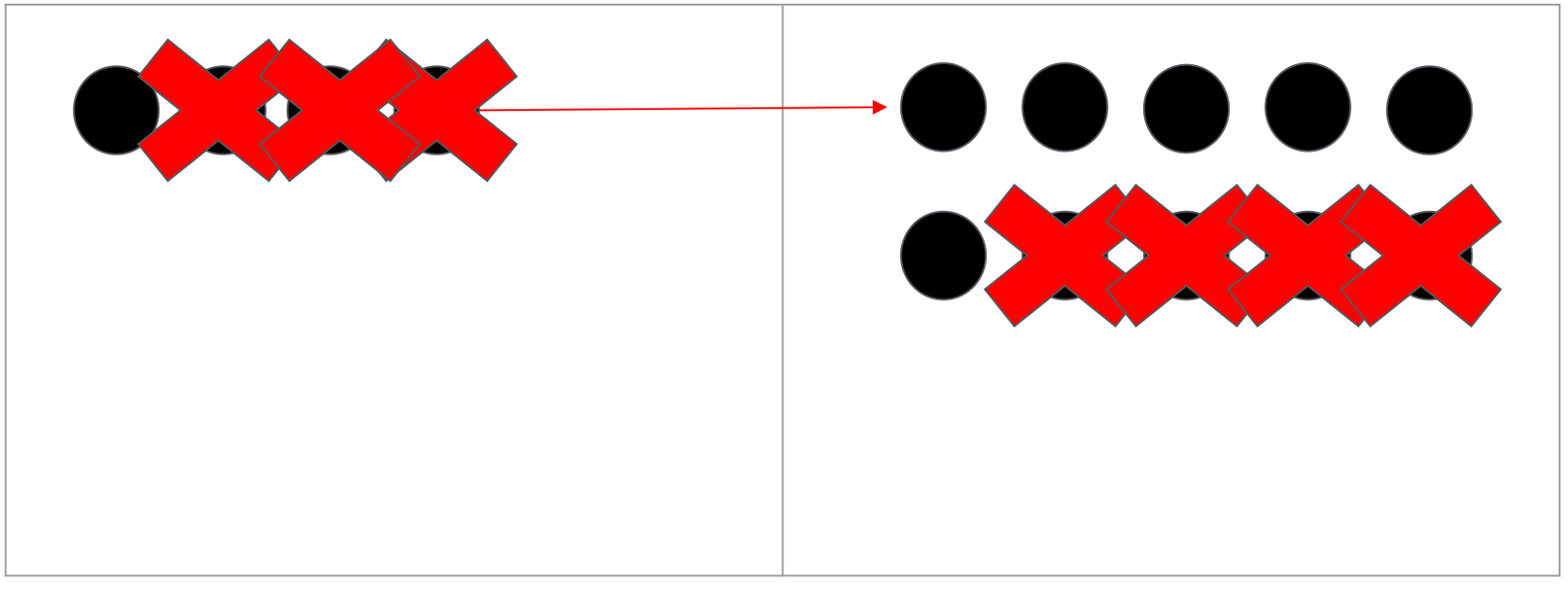
$$\begin{array}{r} {\scriptstyle 3}\ \ {\scriptstyle 10} \\ \cancel{40} \\ -24 \\ \hline \end{array}$$



Concept Development

$$\begin{array}{r} {}^{3}\cancel{4}\,{}^{10}\cancel{0} \\ -\ 24 \\ \hline 1\ 6 \end{array}$$

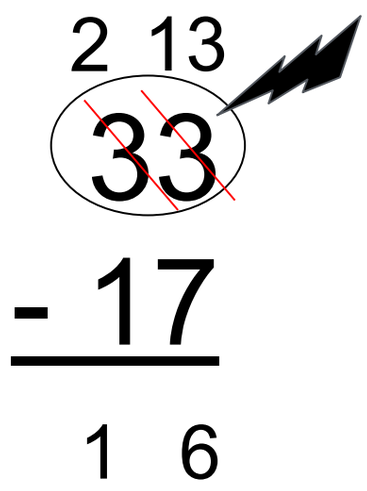
Now can I subtract?

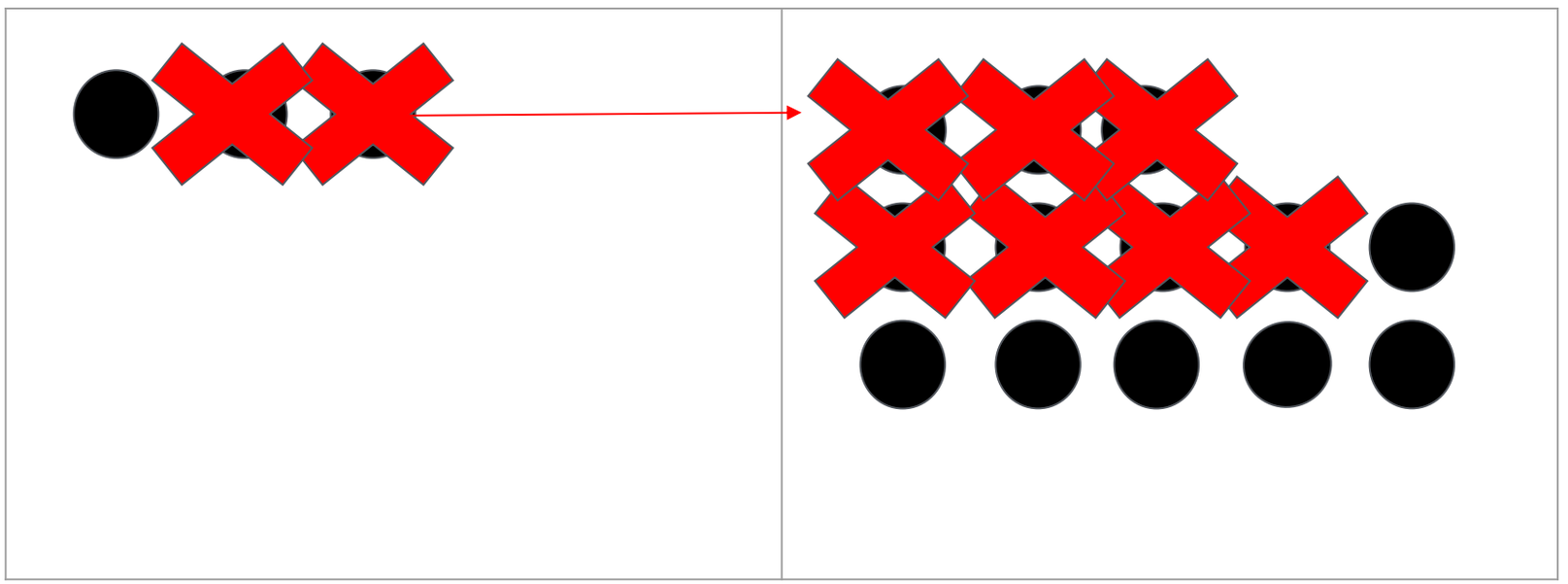


Concept Development

40 – 24 = 33 – 17

Now, we need to see, does 33 - 17 also equal 16?



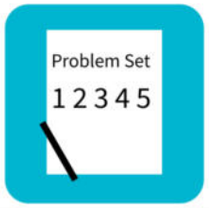


Concept Development

What was 40 - 24?

What was 33-17?

So, is 40 -24 equal to 33 - 17?



Problem Set

Name _____ Date _____

1. Solve vertically. Draw a place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary.

a. 31 - 19 = _____	b. 46 - 24 = _____
c. 51 - 33 = _____	d. 67 - 49 = _____

Debrief

For Problem 1(a), did you decompose a ten? Why? Then how many ones did you have? How many tens were left?

Explain to your partner how to solve Problem 1(c). How did you show decomposing a ten on your model and in vertical form? Could you have solved this problem mentally?

Compare Problems 1(e) and 1(f) with a partner. How did you solve these two problems?
Could you have solved Problem 1(f) without unbundling? How does it relate to Problem 1(e)?

Debrief

For Problem 2,what did you need to be sure to do when solving 31─ 27 using vertical form?
Did you solve 25 – 15 mentally? What was your strategy?

How did you subtract in Problem 3? What is the relationship between 78 – 43 and 81 – 46? What easy simplifying strategy could you use to answer the true/false question?

Exit Ticket

Lesson 12

Objective: Relate manipulative representations to a written method.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(5 minutes)
Concept Development	(34 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**