

Eureka Math

2nd Grade Module 7 Lesson 20

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.

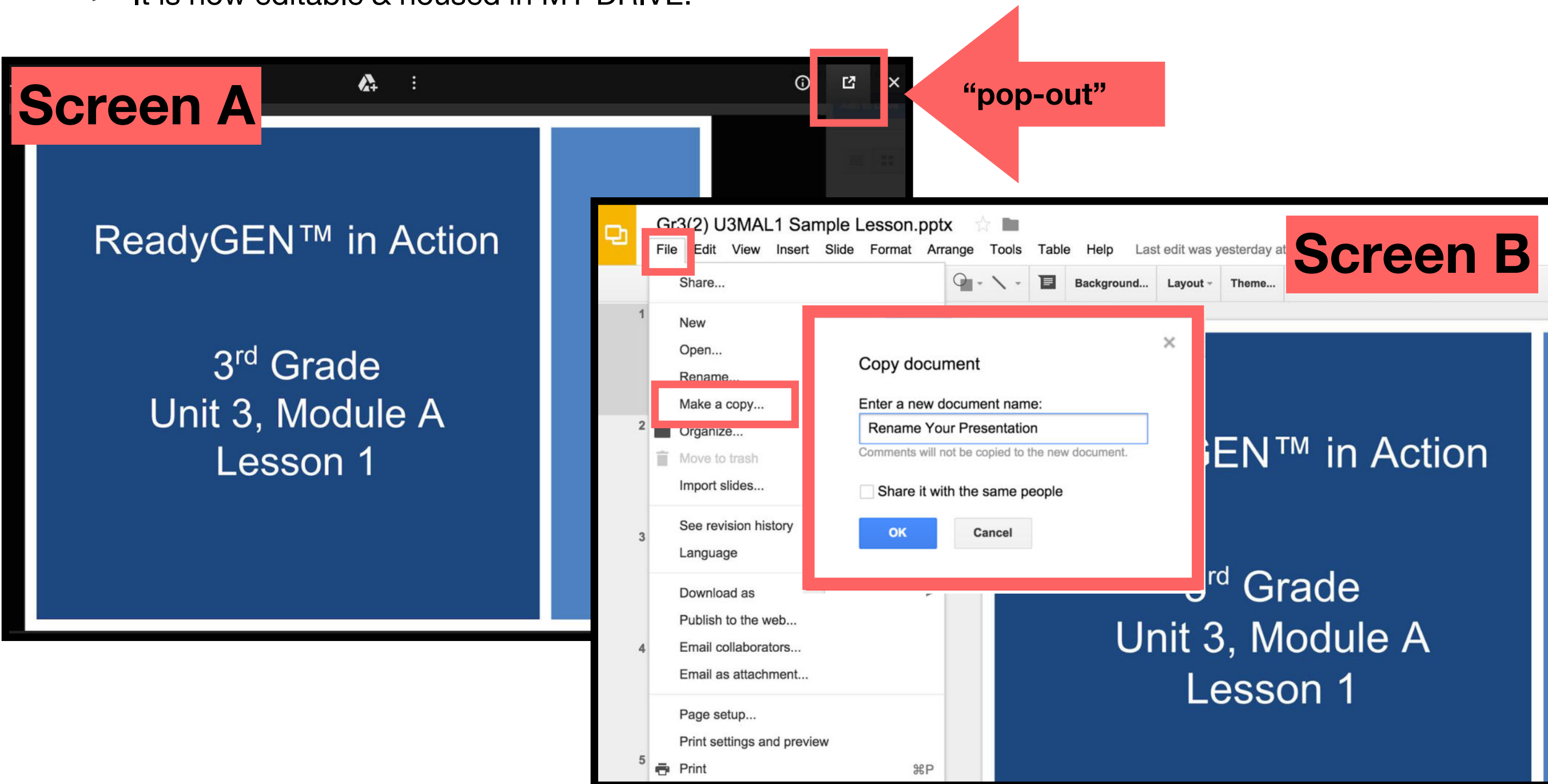


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Customize this Slideshow

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



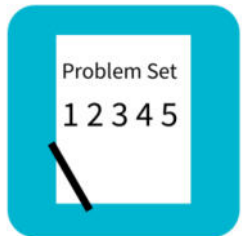
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



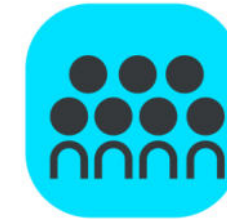
Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



Small Group Time



Materials Needed:

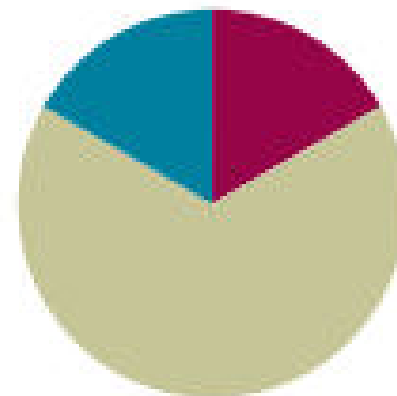
- Whiteboard

Lesson 20

Objective: Solve two-digit addition and subtraction word problems involving length by using tape diagrams and writing equations to represent the problem.

Suggested Lesson Structure

■ Fluency Practice	(10 minutes)
■ Concept Development	(40 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





- I can make a measurement tool and use it to measure things.



Compensation

$$42 + 19 =$$

How much more does 19 need to make the next ten?

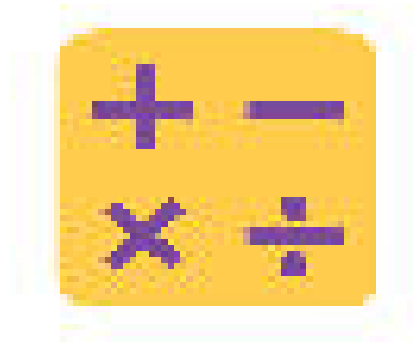
Where can we get 1 more from?

So, if we take 1 from 42, what is our new problem?

$$41 + 20$$

$$41 + 20 = 61$$

(continue with: $29 + 23$, $38 + 19$, $32 + 19$, $24 + 18$, and $34 + 18$)



SPRINT

Subtraction Patterns

A STORY OF UNITS

Lesson 20 Sprint

2•7

A

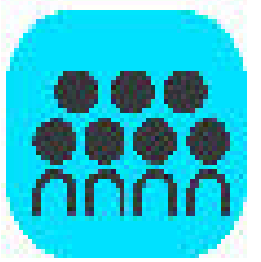
Number Correct: _____

Subtraction Patterns

1.	$8 - 1 =$	
2.	$18 - 1 =$	
3.	$8 - 2 =$	
4.	$18 - 2 =$	
5.	$8 - 5 =$	
6.	$18 - 5 =$	
7.	$28 - 5 =$	
8.	$58 - 5 =$	
9.	$58 - 7 =$	
10.	$10 - 2 =$	

23.	$41 - 20 =$	
24.	$46 - 20 =$	
25.	$7 - 5 =$	
26.	$70 - 50 =$	
27.	$71 - 50 =$	
28.	$78 - 50 =$	
29.	$80 - 40 =$	
30.	$84 - 40 =$	
31.	$90 - 60 =$	
32.	$97 - 60 =$	

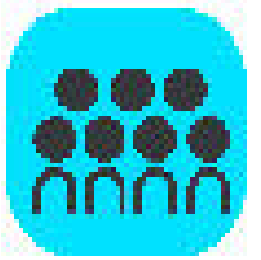
Concept Development



Part 1: Solve a difference unknown type problem.

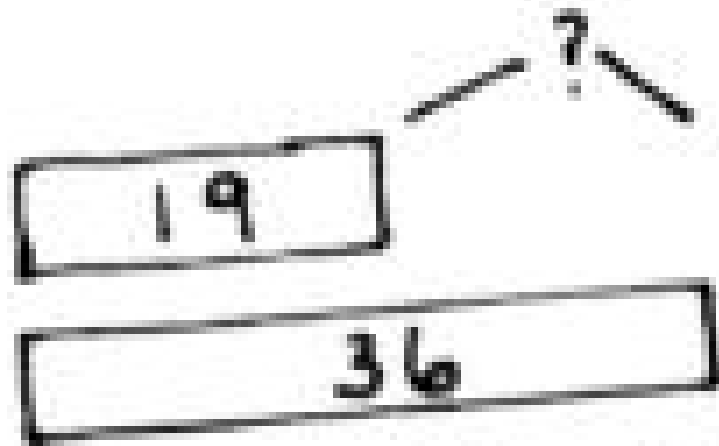
Mr. Ramos has knitted 19 inches of a scarf he wants to be 1 yard long. How many more inches of scarf does he need to knit?

Concept Development



Part 1: Solve a difference unknown type problem.

Mr. Ramos has knitted 19 inches of a scarf he wants to be 1 yard long.
How many more inches of scarf does he need to knit?

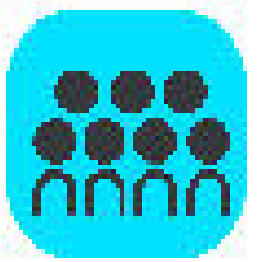


$$36 - 19 = ?$$

$$37 - 20 = 17$$

He needs 17 more inches.

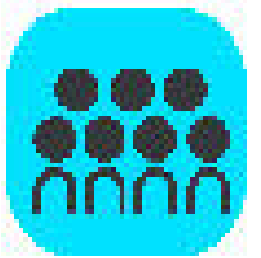
Concept Development



Part 2: Solve a two-step problem with a compare with smaller unknown type problem as one step.

Frankie has a 64-inch piece of rope and another piece that is 18 inches shorter than the first. What is the total length of both ropes?

Concept Development



Part 2: Solve a two-step problem with a compare with smaller unknown type problem as one step.

Frankie has a 64-inch piece of rope and another piece that is 18 inches shorter than the first. What is the total length of both ropes?

The diagram shows two horizontal rectangles. The top rectangle is labeled 'Longer' and contains the number '64'. The bottom rectangle is labeled 'Shorter' and has a bracket on its right side labeled '18'. A large curly brace to the right of both rectangles is labeled '? Total length'.

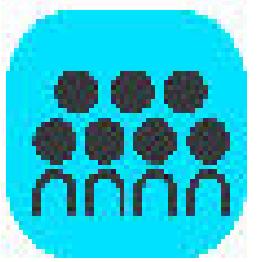
Below the diagram, the solution is written in handwritten text:

$$64 - 18 = 46$$
$$46 + 64 = 110$$

The total length of both ropes is 110 inches.

To the right of the equations is a thought bubble containing the text: 'I have to find the length of the shorter rope first.' Below the bubble is a small stick figure with a smiley face, pointing upwards.

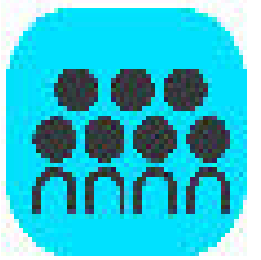
Concept Development



Part 3: Solve a put together problem involving geometry.

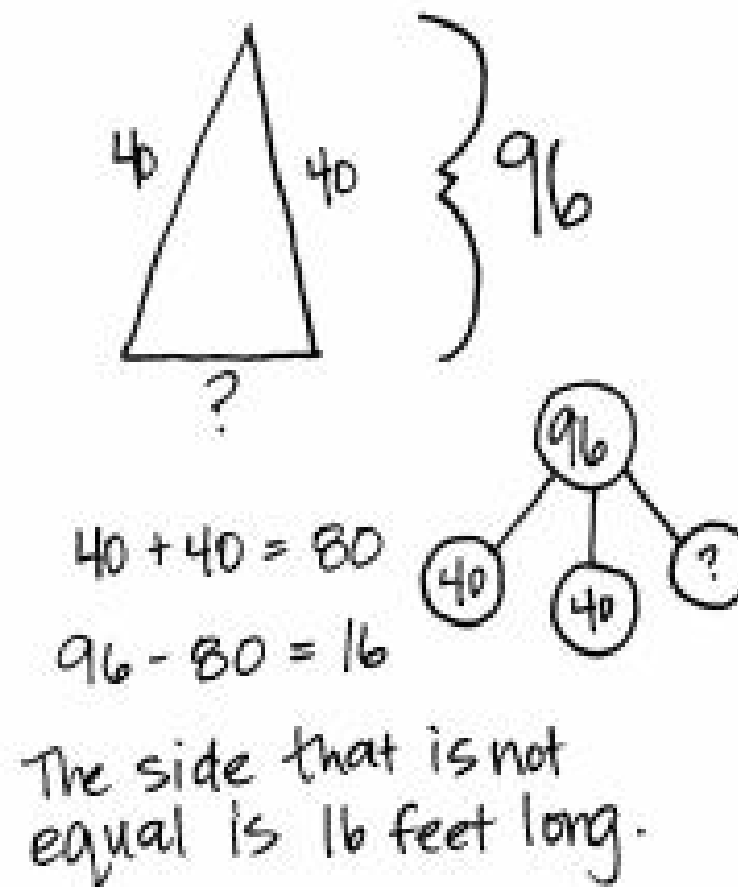
The total length of all three sides of a triangle is 96 feet. The triangle has two sides that are the same length. One of the equal sides measures 40 feet. What is the length of the side that is not equal?

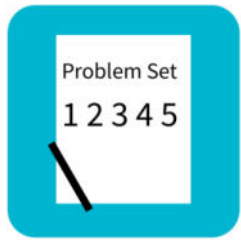
Concept Development



Part 3: Solve a put together problem involving geometry.

The total length of all three sides of a triangle is 96 feet. The triangle has two sides that are the same length. One of the equal sides measures 40 feet. What is the length of the side that is not equal?





Problem Set

A STORY OF UNITS

Lesson 20 Problem Set

2•7

Name _____ Date _____

Solve using tape diagrams. Use a symbol for the unknown.

1. Mr. Ramos has knitted 19 inches of a scarf he wants to be 1 yard long. How many more inches of scarf does he need to knit?
2. In the 100-yard race, Jackie has run 76 yards. How many more yards does she have to run?



Debrief

- Look at the first page of your Problem Set. How many number sentences did it take to solve Problem 1? How many number sentences did it take to solve Problems 2 and 3? Why is it important to reread the problem?
- Explain your solution path for Problem 4 to your partner. Did your partner do the same thing as you? Can you understand how your partner got his answer?
- Look at the triangle problem. Raise your hand if you used only addition. Raise your hand if you used addition and subtraction. (Discuss both solution paths. First, $40 + 40 = 80$. Then, $80 + \underline{\hspace{1cm}} = 96$ or $96 - 80 = \underline{\hspace{1cm}}$.)
- Sometimes there is more than one part in our math problems. Tell your partner a math story with more than one part. Use your Problem Set to help you get started.



Exit Ticket

A STORY OF UNITS

Lesson 20 Exit Ticket

2•7

Name _____

Date _____

Solve using a tape diagram. Use a symbol for the unknown.

Jasmine has a jump rope that is 84 inches long. Marie's is 13 inches shorter than Jasmine's. What is the length of Marie's jump rope?