Eureka Math

3rd Grade
Module 3
Lesson 21

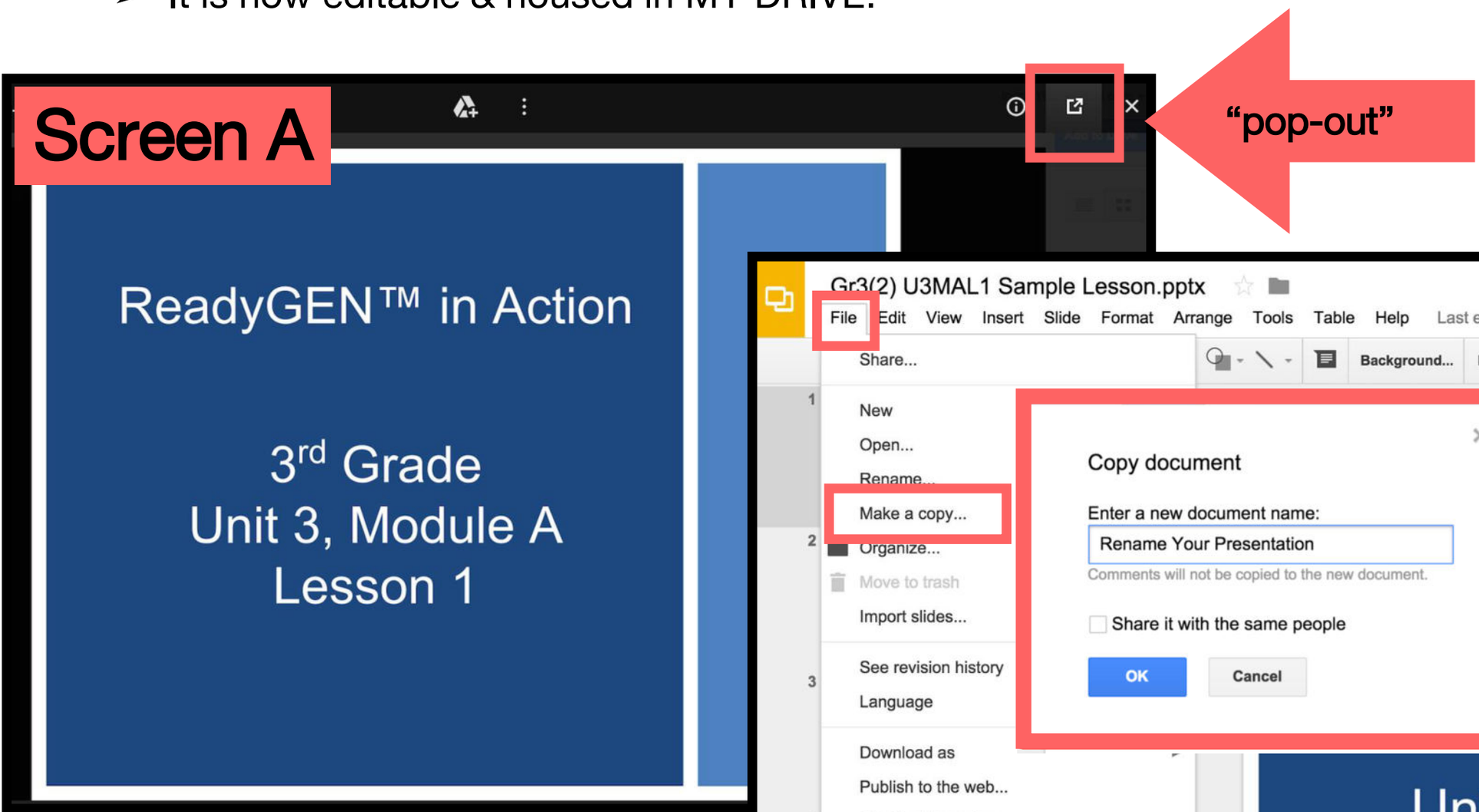
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

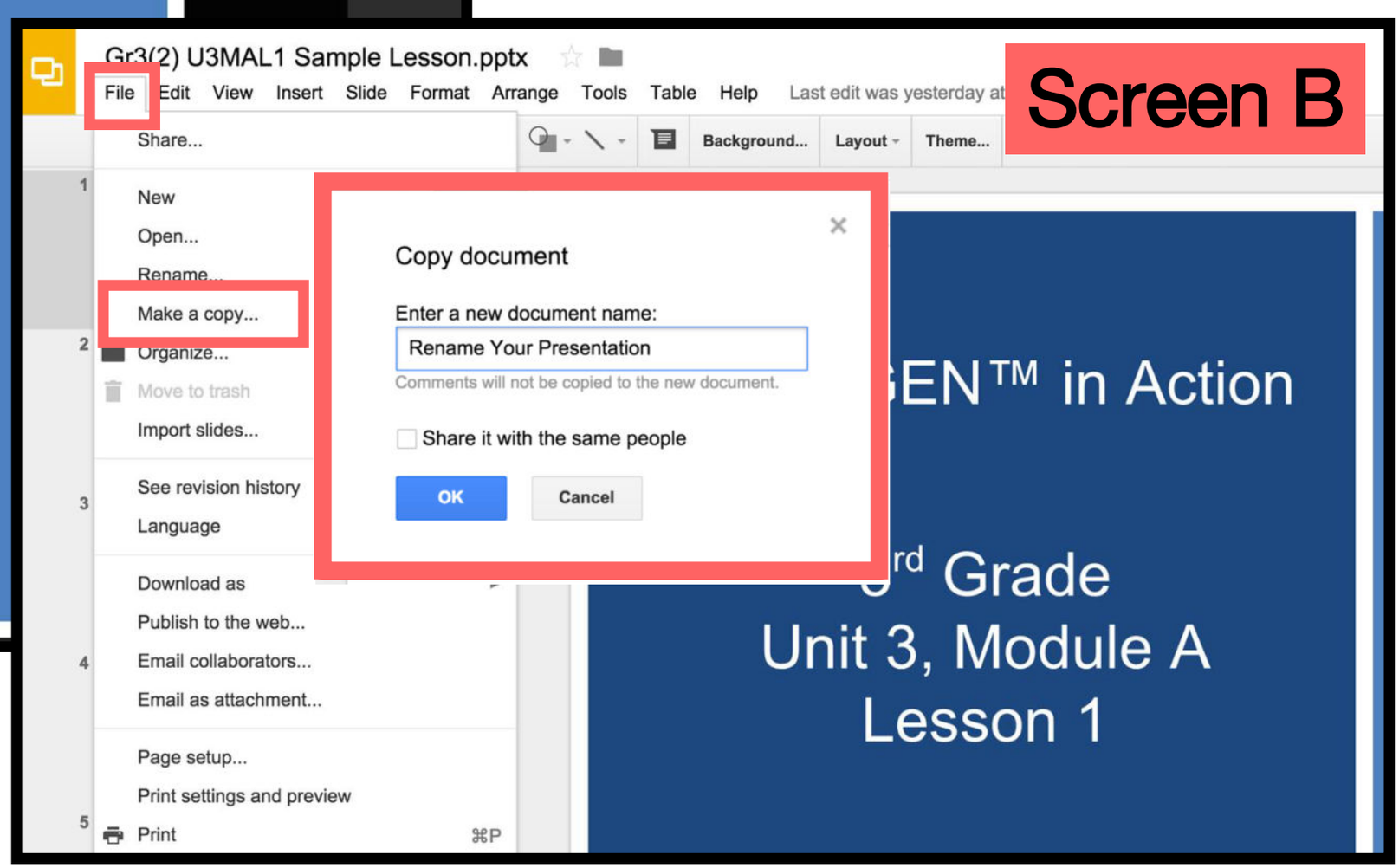
Directions for customizing presentations are available on the next slide.

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.



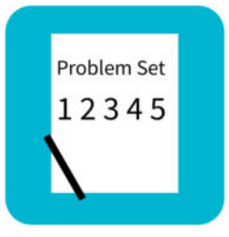


Icons

Read, Draw, Write

Learning Target

Personal White Board

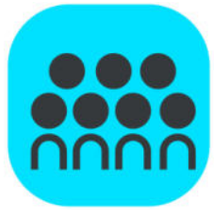


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

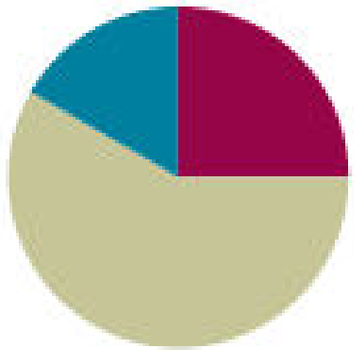
Small Group Time

Lesson 21

Objective: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Concept Development	(35 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



NOTES ON STANDARDS ALIGNMENT:

I can solve two-step word problems involving multiplying single-digit factors and multiples of 10.

Fluency Practice

Sprint - Multiply by Multiples of 10

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

Sixes to 60

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

Sevens to 70

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

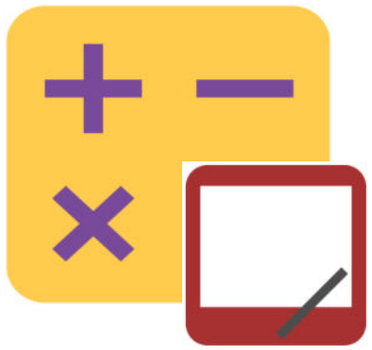
Eights to 80

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

Nines to 90

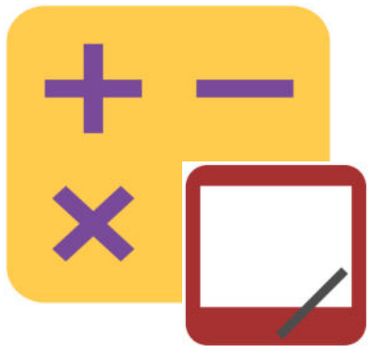


Fluency Practice

Write in the Parentheses

2 x 40 = 2 x 4 x 10

What is 2 x 40?



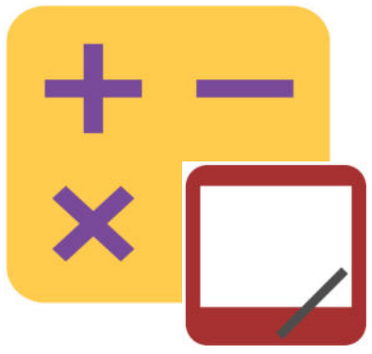
Fluency Practice

Write in the Parentheses

2 x 40 = 2 x 4 x 10

What is 2 x 40?

80

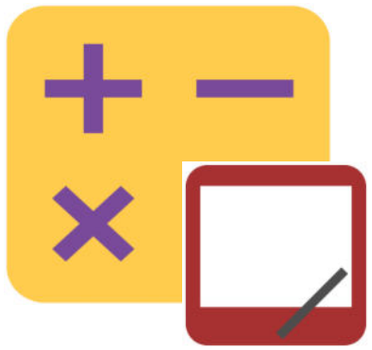


Fluency Practice

Write in the Parentheses

2 x 40 = 2 x 4 x 10

On your personal white board, copy the number sentence. Then, write in parentheses and solve.



Fluency Practice

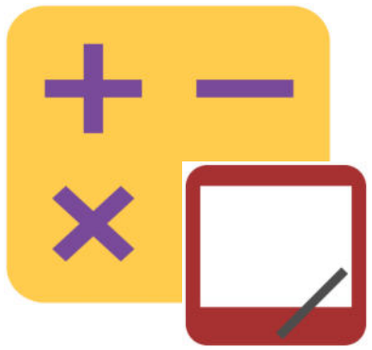
Write in the Parentheses

$2 \times 40 = 2 \times 4 \times 10$

$2 \times 40 = (2 \times 4) \times 10$

$2 \times 40 = 8 \times 10$

$2 \times 40 = 80$

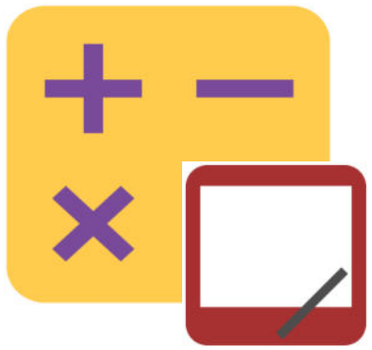


Fluency Practice

Write in the Parentheses

3 x 30 = 3 x 3 x 10

What is 3 x 30?



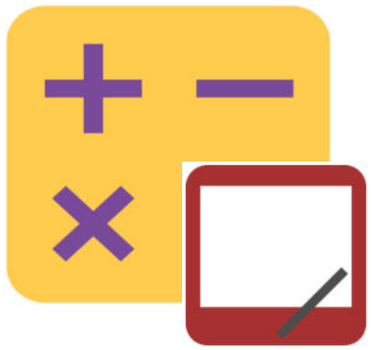
Fluency Practice

Write in the Parentheses

3 x 30 = 3 x 3 x 10

What is 3 x 30?

90



Fluency Practice

Write in the Parentheses

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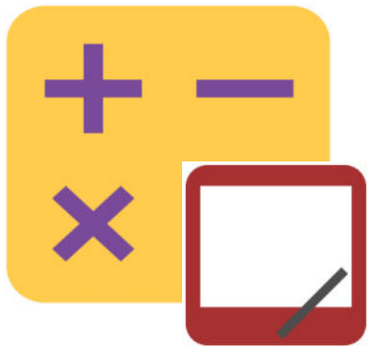


Fluency Practice

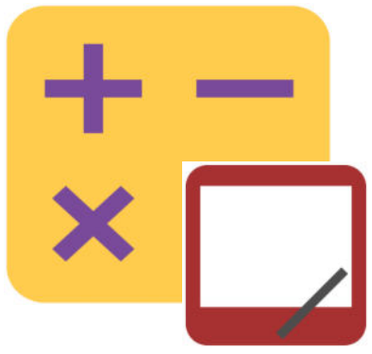
Write in the Parentheses

$3 \times 30 = 3 \times 3 \times 10$

$3 \times 30 = (3 \times 3) \times 10$

$3 \times 30 = 9 \times 10$

$3 \times 30 = 90$

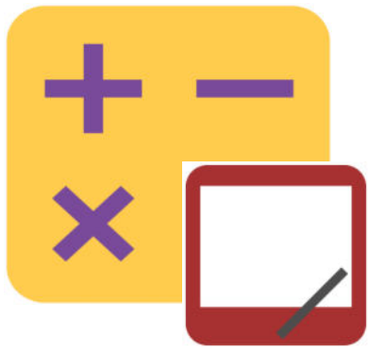


Fluency Practice

Write in the Parentheses

2 x 50 = 2 x 5 x 10

What is 2 x 50?



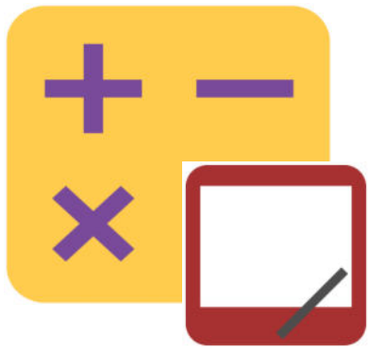
Fluency Practice

Write in the Parentheses

2 x 50 = 2 x 5 x 10

What is 2 x 50?

100

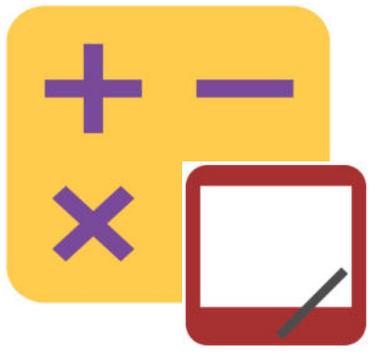


Fluency Practice

Write in the Parentheses

2 x 50 = 2 x 5 x 10

On your personal white board, copy the number sentence. Then, write in parentheses and solve.



Fluency Practice

Write in the Parentheses

$2 \times 50 = 2 \times 5 \times 10$

$2 \times 50 = (2 \times 5) \times 10$

$2 \times 50 = 10 \times 10$

$2 \times 50 = 100$

Concept Development

Materials

(T) Stopwatch, multiples of 10 multiplication cards

(S) Personal white boards

Concept Development

Place one card face down on each student's desk. At the prompt of "Go!," each student solves his or her problem. Students then line up as a class, ordering their products from least to greatest. Instruct students to complete these tasks silently and quickly. Let them know that they will be timed and that extra time will be added as a penalty if they are too noisy.

Concept Development

It took you 4 minutes and 13 seconds to find the products and order them from least to greatest. How do we find the total number of seconds it took to complete this activity?

Concept Development

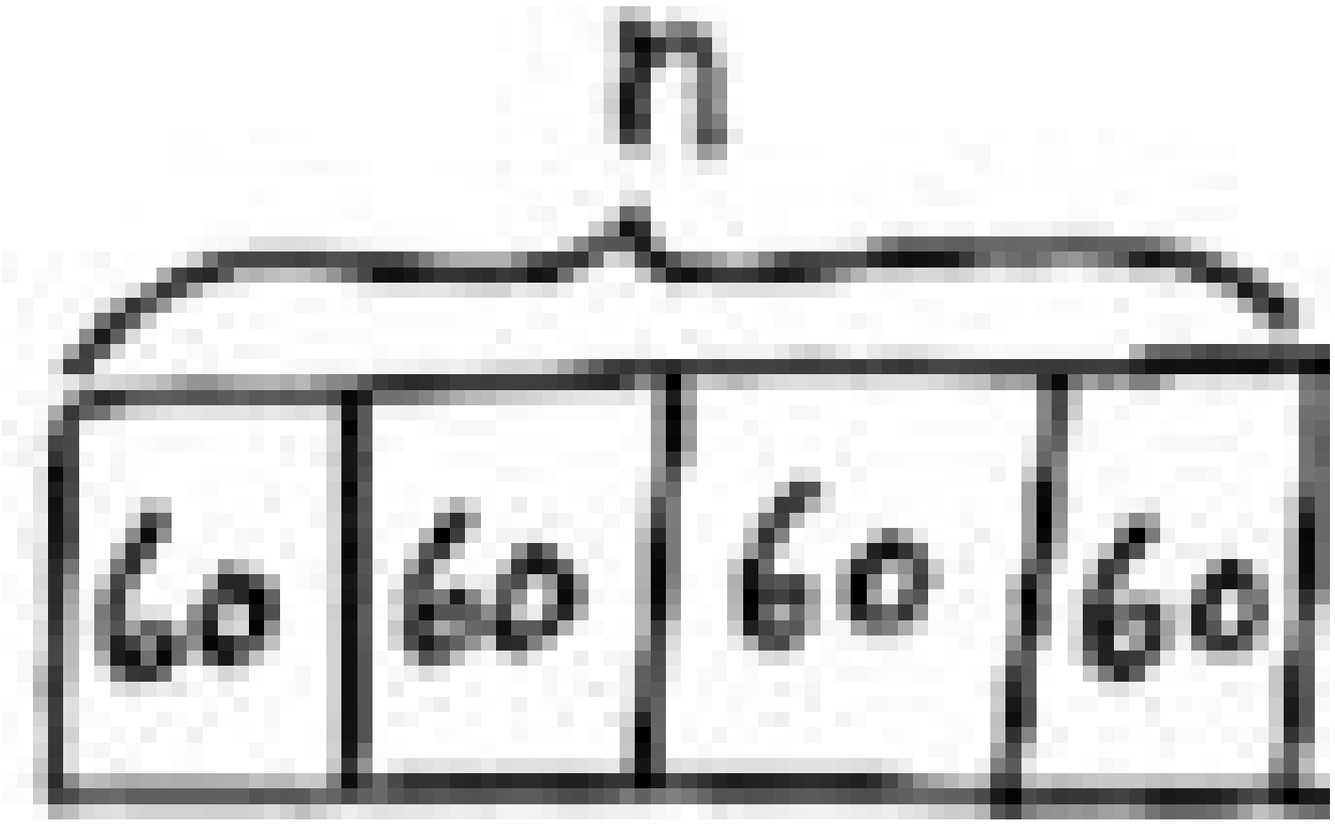
Add the total seconds in 4 minutes to 13 seconds. We need to know how many seconds are in 1 minute first.

Concept Development

Add the total seconds in 4 minutes to 13 seconds. We need to know how many seconds are in 1 minute first.

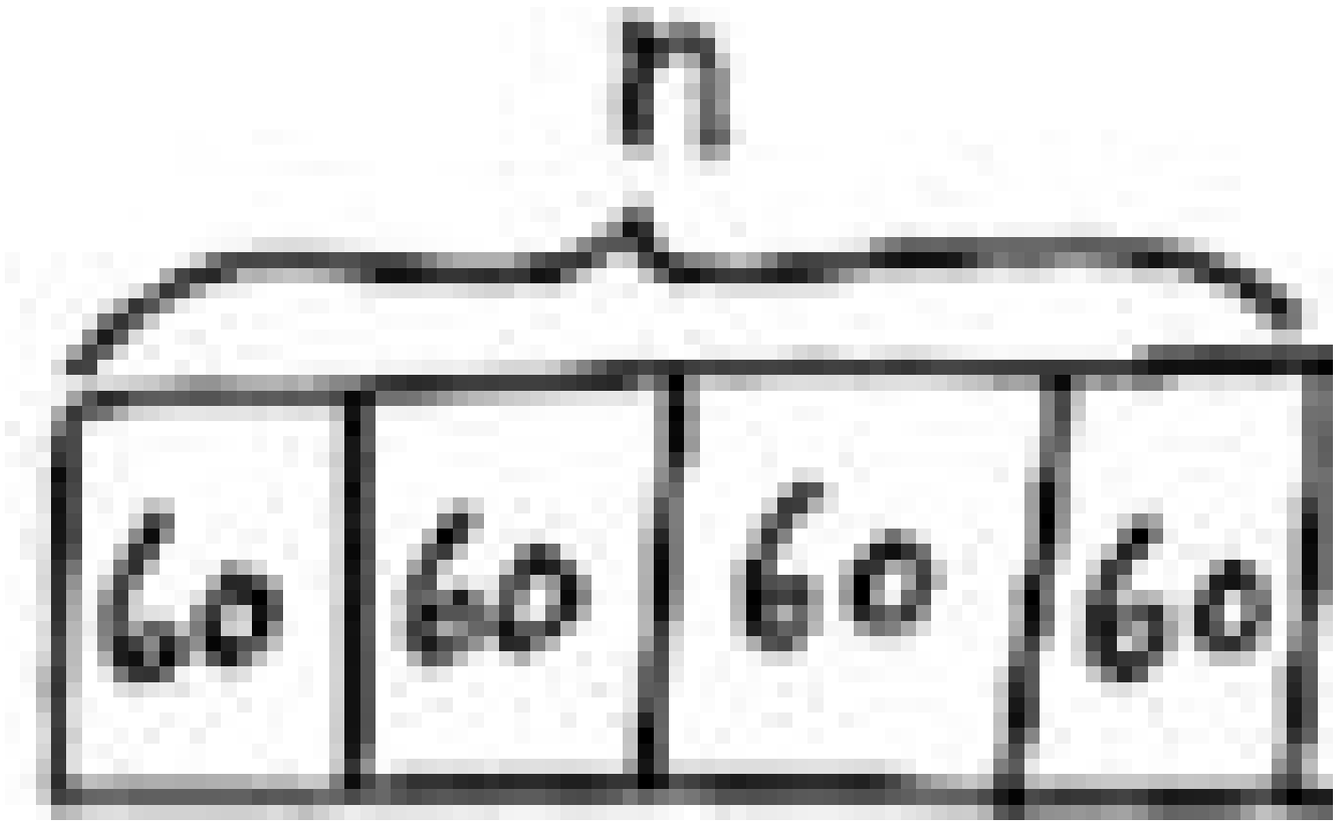
There are 60 seconds in 1 minute. Draw and label a tape diagram to show the total number of seconds in 4 minutes. Label the unknown as n. Then, check with a partner.

Concept Development



Now write an equation and solve.

Concept Development



$4 \times 60 = n$

$n = 240$

Concept Development

Discuss with a partner the strategy you used to solve 4 x 60.

Concept Development

Four minutes is equal to how many seconds?

Concept Development

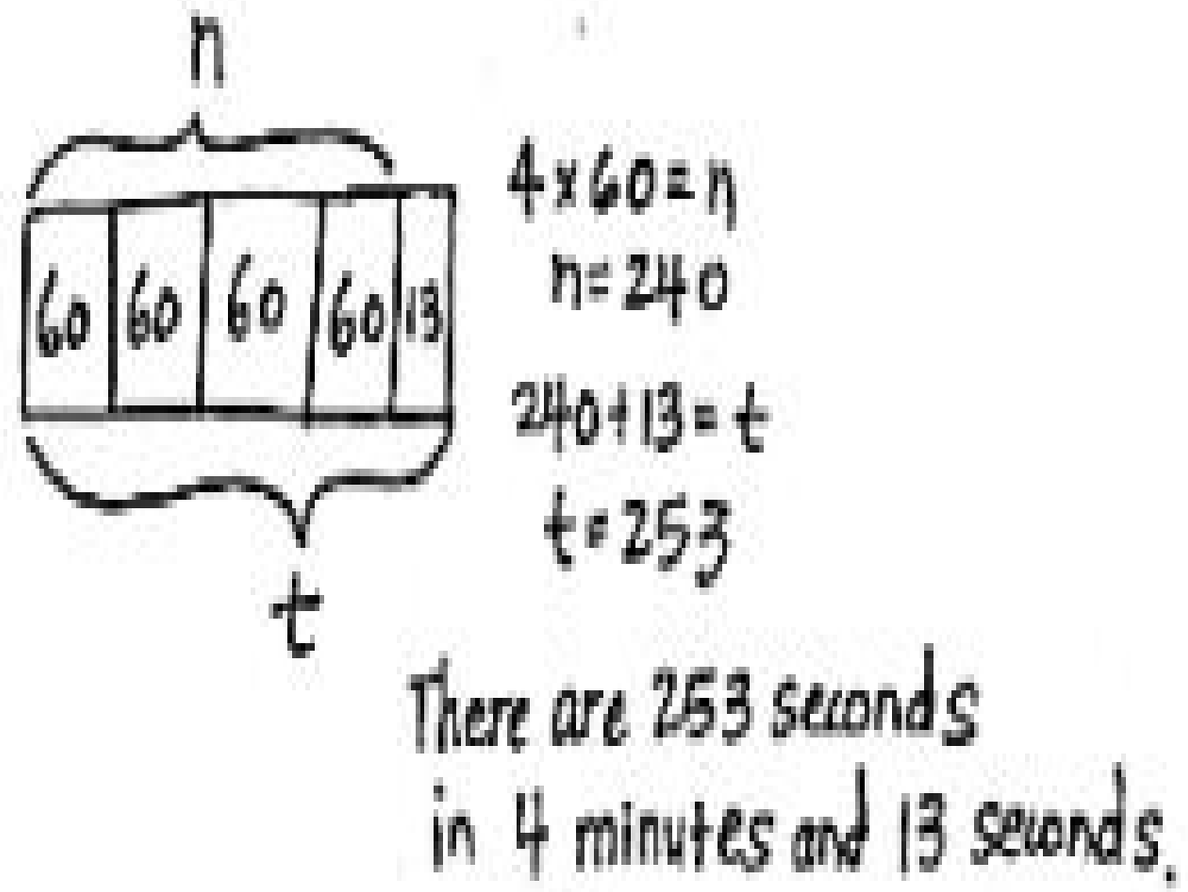
Four minutes is equal to how many seconds?

240

Whisper the next step to your partner.

Concept Development

Add a unit of 13 to your diagram and label the total number of seconds using *t* for the unknown. Then, solve for *t*. How many seconds did it take you to complete the activity?

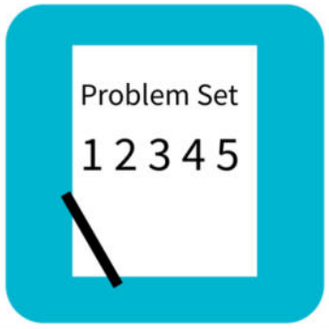


Concept Development

Each day Andrea does 25 squats to warm up for gymnastics practice and 15 squats to cool down after practice. How many squats does she do in all when she practices Monday through Friday?

Benny gets $5 a week for allowance. After saving his money for 20 weeks, how much more does Benny need to buy a bike that costs $108?

Genevieve makes 43 bracelets. She gives 13 bracelets away as gifts and sells the rest for $4 each. How much money does Genevieve make in all?



Problem Set

Name _____ Date _____

Use the RDW process to solve each problem. Use a letter to represent the unknown.

1. There are 60 seconds in 1 minute. Use a tape diagram to find the total number of seconds in 5 minutes and 45 seconds.

Debrief

In Problem 2, how many more months will Lupe need to save so she has enough to buy the art supplies? How do you know?

In Problem 3, how many dollars does Brad earn?(Consider prompting students by asking how many cents are in 1 dollar.)

Discuss the second step of Problem 4 with a partner. How was this different than the otherp roblems? Explain how you could solve it with multiplication.

Explain the three unknowns you needed to find to solve Problem 5.

Explain to a partner how you solved Problem 6.

Explain how you could have used the multiplying by 10 strategy to help solve this problem.

Exit Ticket

Name _____ Date _____

Use the RDW process to solve. Use a letter to represent the unknown.

Frederick buys a can of 3 tennis balls. The empty can weighs 20 grams, and each tennis ball weighs 60 grams. What is the total weight of the can with 3 tennis balls?