Eureka Math

3rd Grade
Module 2
Lesson 5

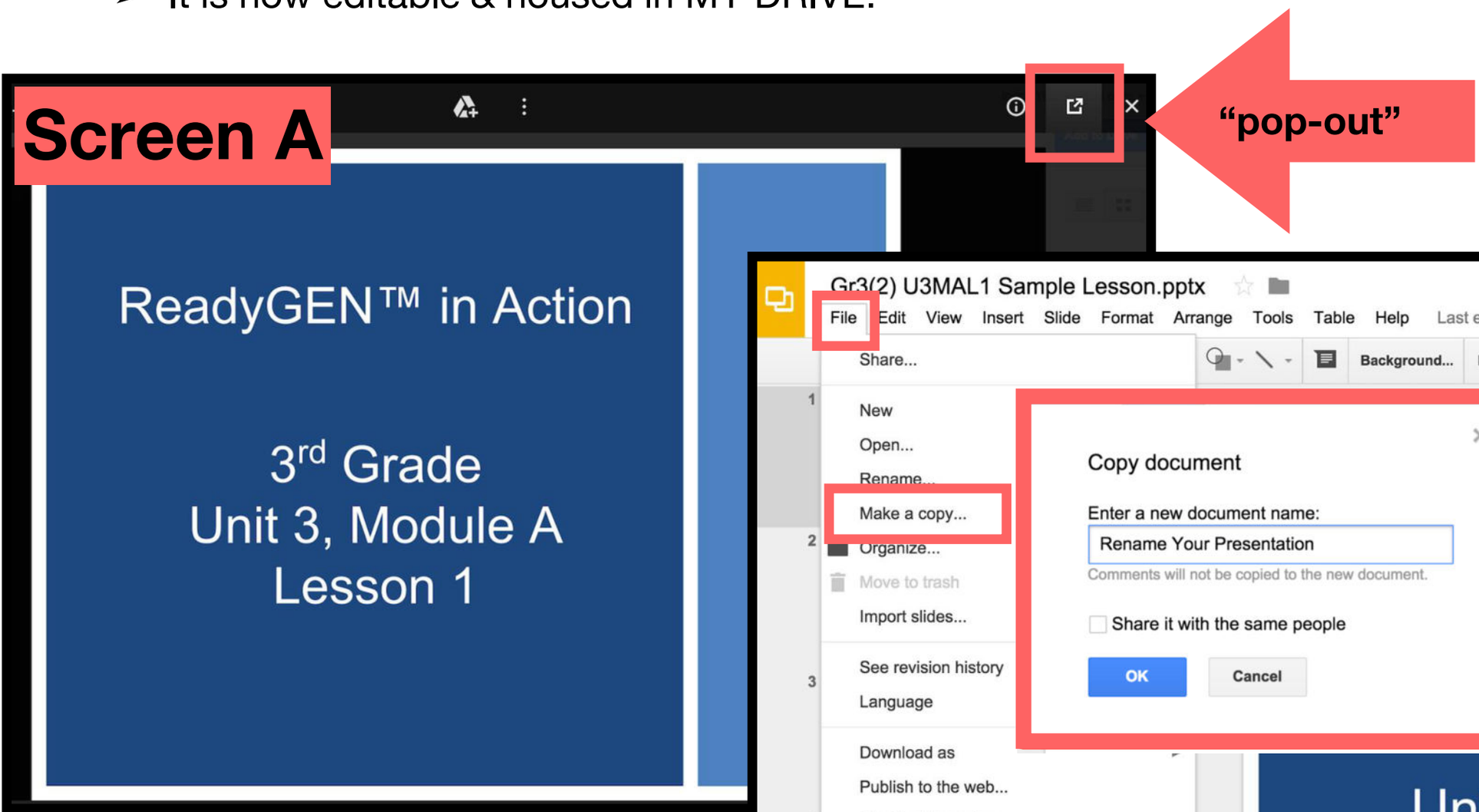
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

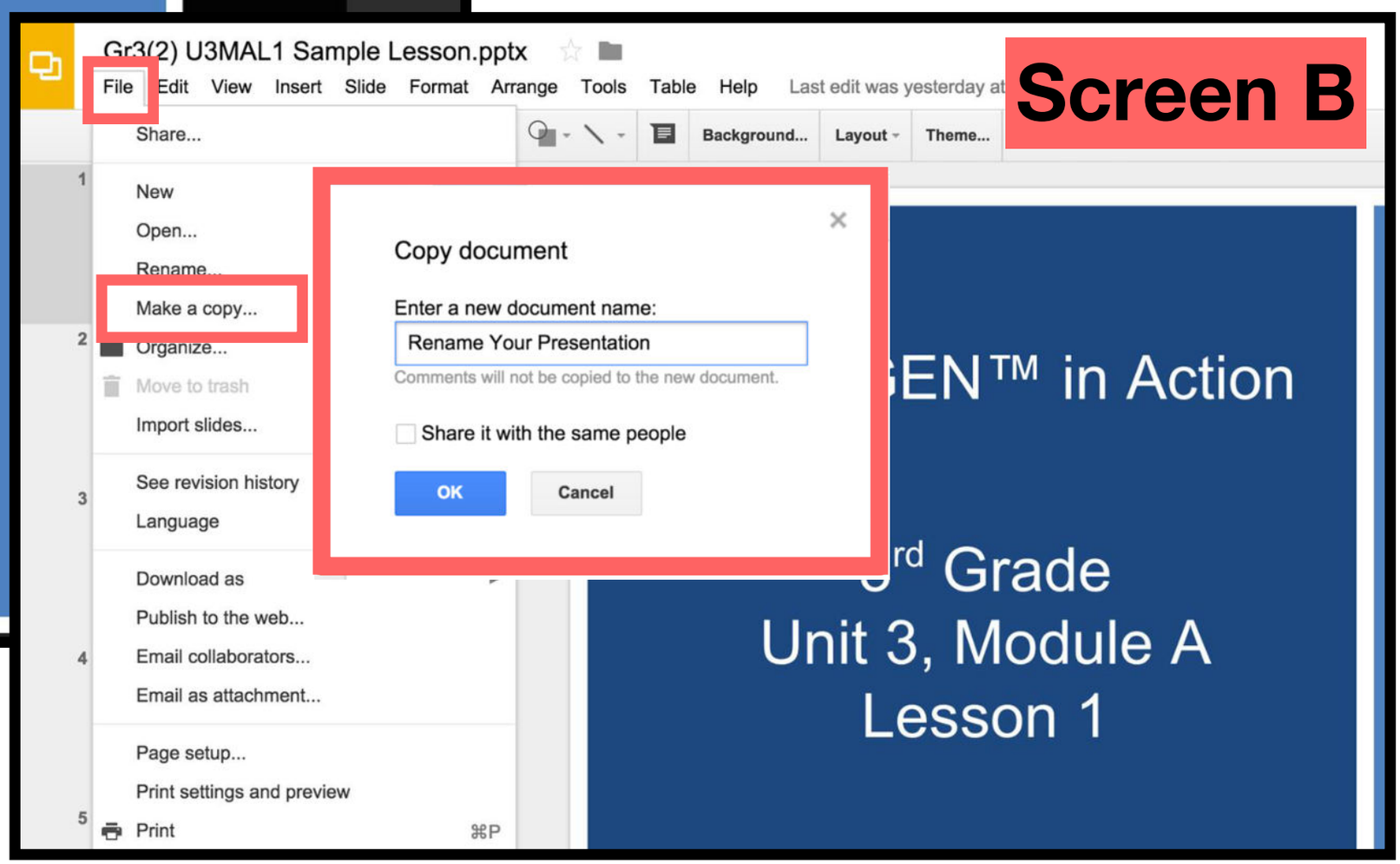
Directions for customizing presentations are available on the next slide.

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

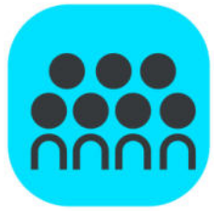
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

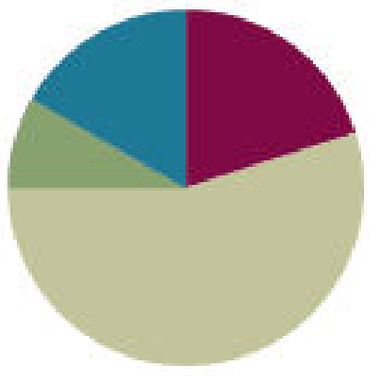
Small Group Time

Lesson 5

Objective: Solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**

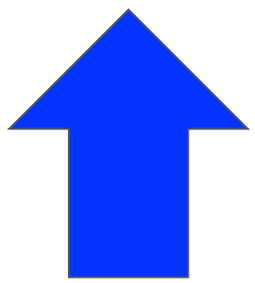


I can solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

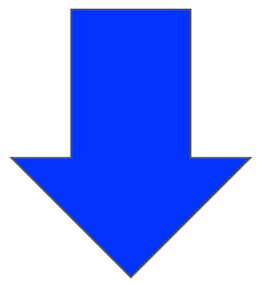
Group Counting

Count by Sevens to 56.

Say all of the numbers. Watch my fingers to know whether to count forward or backward. A closed hand means stop.



Count forward

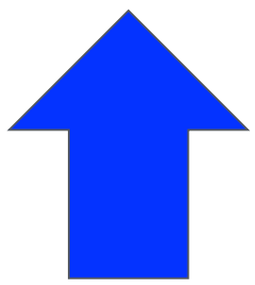


Count backward

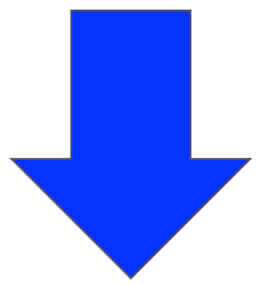
Group Counting

Count by Eights to 64.

Say all of the numbers. Watch my fingers to know whether to count forward or backward. A closed hand means stop.



Count forward

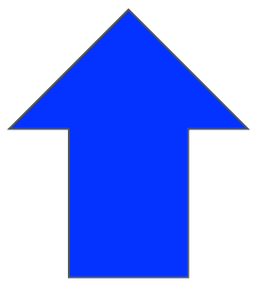


Count backward

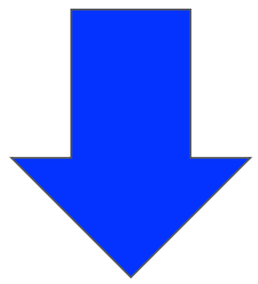
Group Counting

Count by Nines to 72.

Say all of the numbers. Watch my fingers to know whether to count forward or backward. A closed hand means stop.

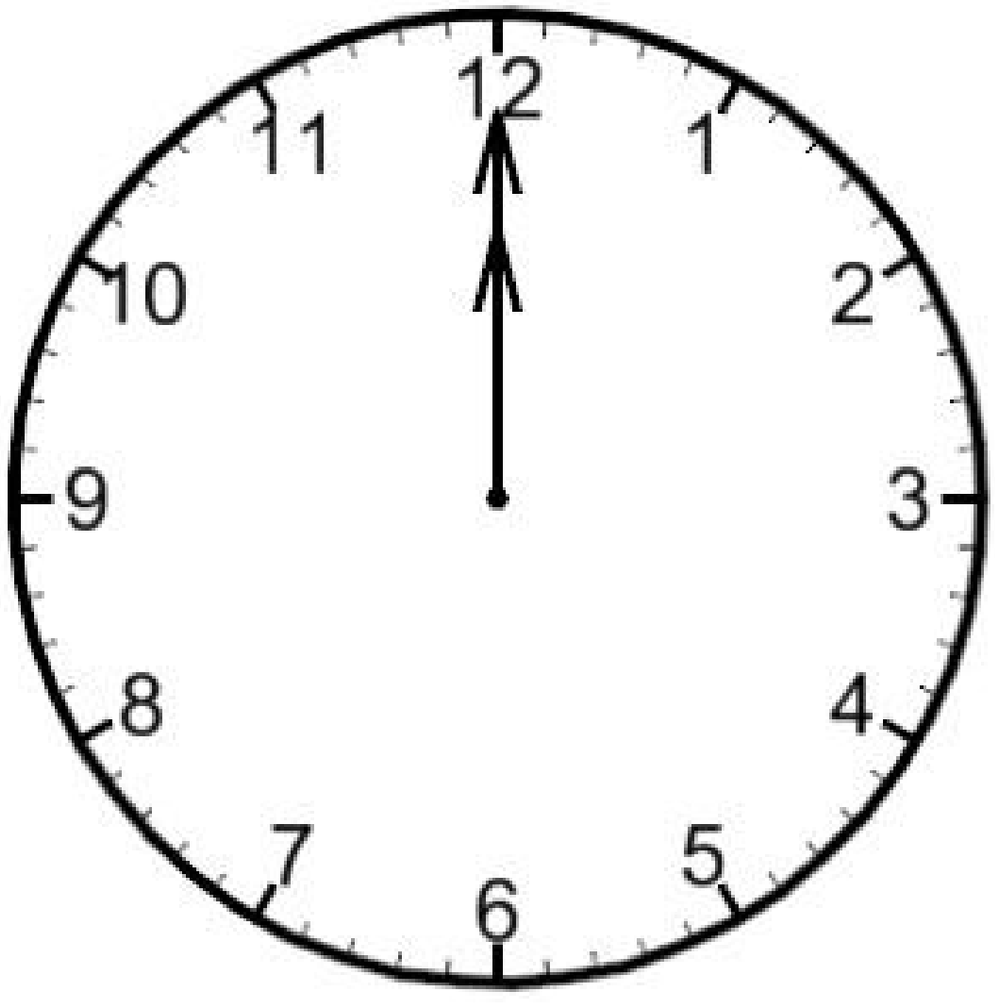


Count forward



Count backward

Telling Time on the Clock

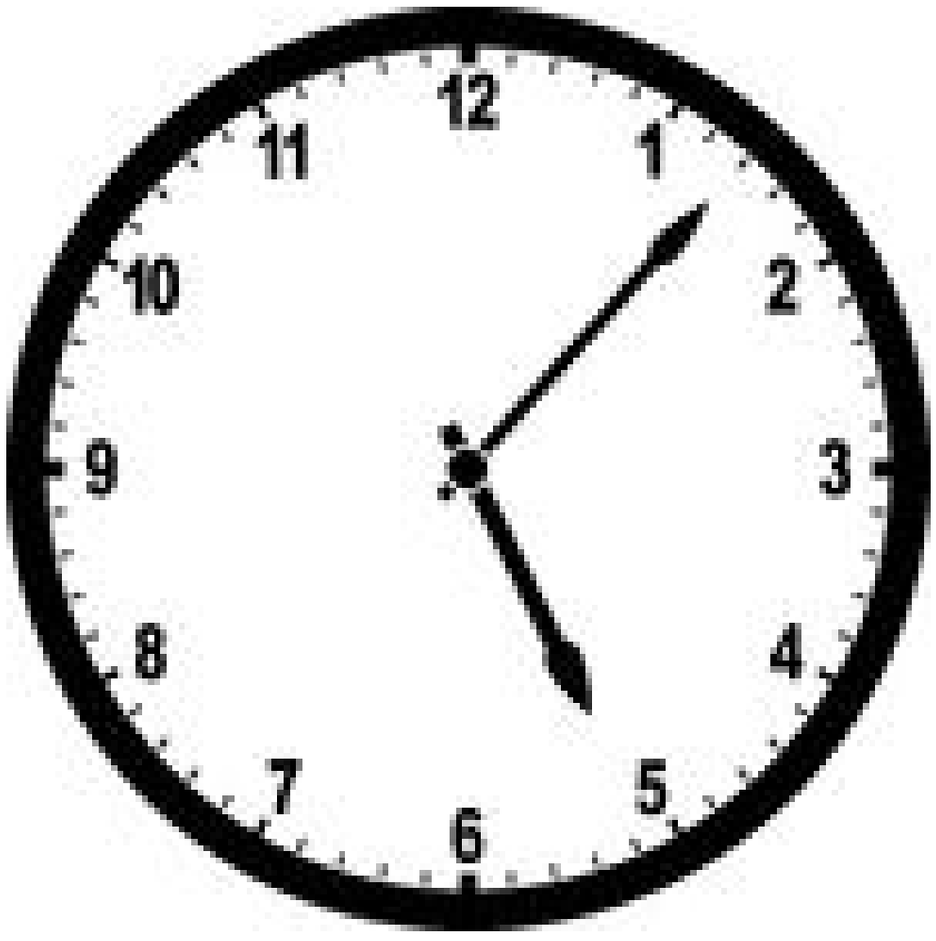


Start at 12 and count by 5 minutes on the clock.

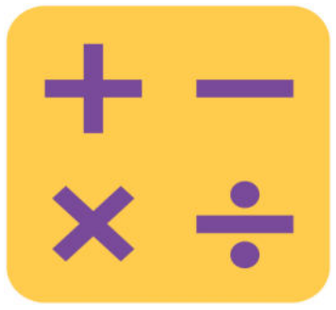
Telling Time on the Clock

I'll show a time on a clock. Write the time on your personal white board.

Telling Time on the Clock



Telling Time on the Clock



Minute Counting

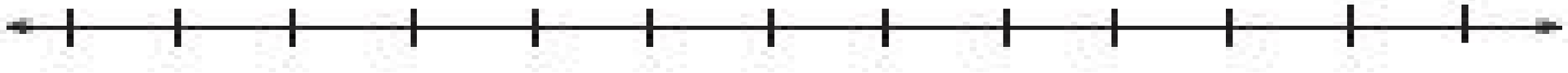
Count by 5 minutes to 1 hour forward and backward, naming the quarter hour and half hour intervals.

Application Problem

Carlos gets to class at 9:08 a.m. He has to write down homework assignments and complete morning work before math begins at 9:30 a.m. How many minutes does Carlos have to complete his tasks before math begins?

RDW

Time Word Problems



- Use your number line template to label the points when Carlos arrives and when math starts.

- Writing down homework assignments is the first thing Carlos does when he gets to class. It takes 4 minutes. Work with your partner to plot the point that shows when Carlos finishes this first task.

Time Word Problems

- At what time did you plot the point?
- What does the interval between 9:12 and 9:30 represent?
- How can we find the number of minutes it takes Carlos to complete morning work?

Time Word Problems

- What addition sentence represents this problem?

- With your partner, find the number of minutes it takes Carlos to complete morning work.

- How many minutes did it take Carlos to finish morning work?

Time Word Problems

Talk with your partner. How could we have modeled that problem by counting backward?

What subtraction sentence represents this problem?

Time Word Problems

Gia, Carlos's classmate, gets to class at 9:11. It takes her 19 minutes to write homework assignments and complete morning work.

- How can we figure out if Gia will be ready to start math at 9:30?
- What do we know?
- What is unknown?

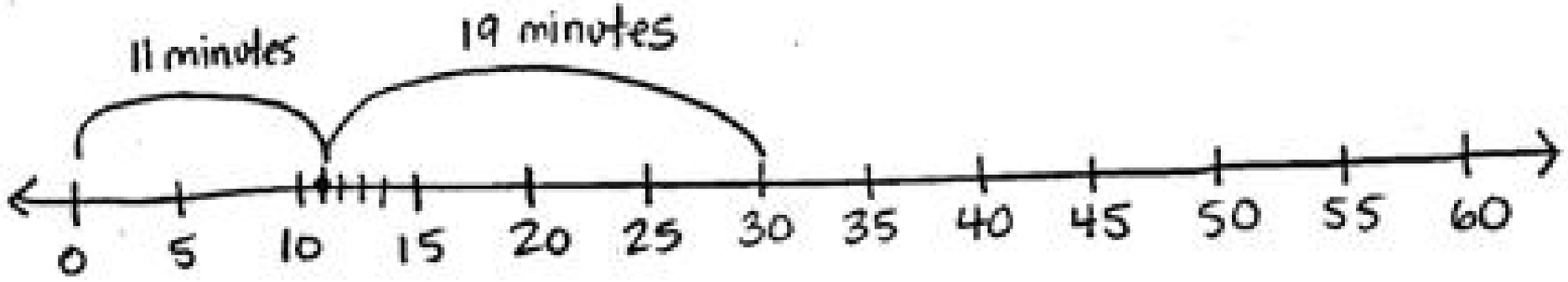
Time Word Problems

Gia, Carlos's classmate, gets to class at 9:11. It takes her 19 minutes to write homework assignments and complete morning work.

- How can we find what time Gia finished morning work?

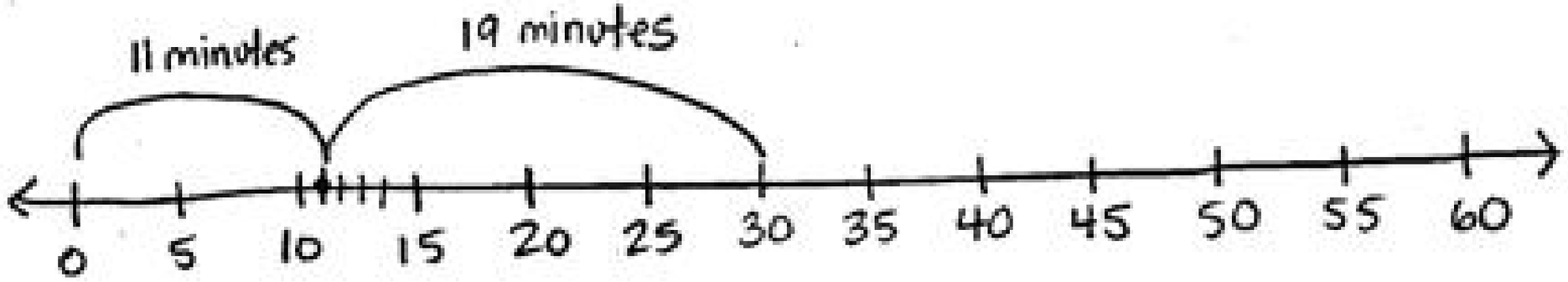
Time Word Problems

Gia, Carlos's classmate, gets to class at 9:11. It takes her 19 minutes to write homework assignments and complete morning work.



Talk with your partner about why this number line shows 11 minutes + 19 minutes.

Time Word Problems



- When we add our 2 parts, 11 minutes + 19 minutes, what is our whole?
- Does Gia finish on time?
- Think back to the Application Problem where Carlos gets to class at 9:08 a.m. If he left for school at 9:00 a.m., then what do the 8 minutes from 9:00 to 9:08 represent?

Time Word Problems

- We know the whole, 30 minutes, and 1 part. What does the unknown part represent?

- Work with your partner to draw a number line and label the known and unknown intervals.

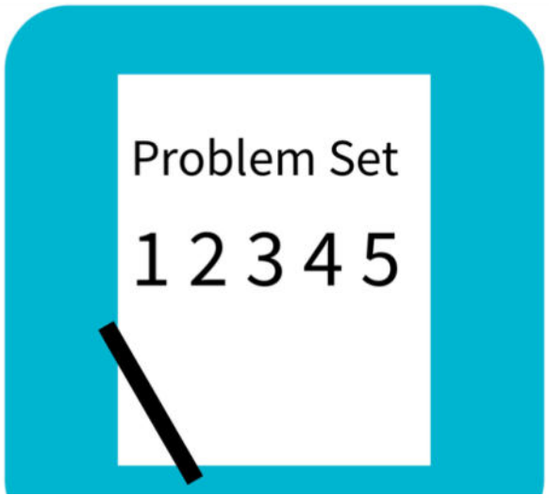
- What is 30 minutes – 8 minutes?

Time Word Problems

Note to teacher:

Repeat the process using the following suggestions:

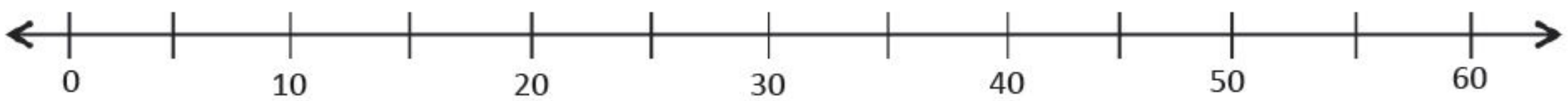
- *Joey gets home at 3:25 p.m. It takes him 7 minutes to unpack and 18 minutes to have a snack before starting his homework. What is the earliest time Joey can start his homework?*
- *Shane's family wants to start eating dinner at 5:45 p.m. It takes him 15 minutes to set the table and 7 minutes to help put the food out. If Shane starts setting the table at 5:25 p.m., will his chores be finished by 5:45 p.m.?*
- *Tim gets on the bus at 8:32 a.m. and gets to school at 8:55 a.m. How long is Tim's bus ride? Joanne takes the same bus as Tim, but her bus ride is 25 minutes. What time does Joanne get on the bus?*
- *Davis has 3 problems for math homework. He starts at 4:08 p.m. The first problem takes him 5 minutes, and the second takes him 6 minutes. If Davis finishes at 4:23 p.m., how long does it take him to solve the last problem?*



Problem Set

Name _____ Date _____

1. Cole read his book for 25 minutes yesterday and for 28 minutes today. How many minutes did Cole read altogether? Model the problem on the number line, and write an equation to solve.



Cole read for _____ minutes.

2. Tessa spends 34 minutes washing her dog. It takes her 12 minutes to shampoo and rinse and the rest of the time to get the dog in the bathtub! How many minutes does Tessa spend getting her dog in the

Debrief

Any combination of the questions below may be used to lead the discussion.

- Describe the process of drawing the number line for Problem 2. Explain how you labeled it. (Call on students who used different ways of thinking about and labeling parts and wholes to share.)
- How did your answer to Problem 4(a) help you solve Problem 4(b)?
- In Problem 5, you had to find a start time. How is your approach to finding a start time different from your approach to finding an end time?
- Besides a number line, what other models could you use to solve Problems 2, 4, and 5?

Exit Ticket

Name _____ Date _____

Michael spends 19 minutes on his math homework and 17 minutes on his science homework.

How many minutes does Michael spend doing his homework?

Model the problem on the number line, and write an equation to solve.