



Math lessons

Lesson Plan

NAME: Emilia Haro

DATE and TIME: Tuesday, October 22nd 10:00-10:30

DURATION of LESSON: 30 minutes

SUBJECT: Math

LESSON NAME: Saree Silk Stories: necklaces and bracelets

GRADE LEVEL: 2nd

COMMON CORE STATE STANDARDS (CCSS):

2.MD.B.5: Use ~~addition~~ and subtraction within 100 to solve word problems involving lengths that are given in the same units

CONTENT OBJECTIVES-

- Students will understand how to solve one-step story problems about length
- Students will solve Take From problems and make sense of tape diagrams.

LANGUAGE OBJECTIVES-

- Students will discuss with a partner what they notice about the image of the scissors cutting the ribbon and the tape diagram below (number talk/warm up).
- Students will discuss the questions in activity one with their partner and then compare answers after working independently.

ENGLISH LANGUAGE DEVELOPMENT (ELD) STANDARDS AND PROFICIENCY LEVELS

2nd grade. Section 2. Part 1 Interacting in Meaningful Ways

A. Collaborative ; 1.Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic topic

Emerging: *Exchanging information/ideas:* Contribute to conversations and express ideas by asking and answering yes-no and wh- questions and responding using short phrases

Expanding: *Exchanging Information/Ideas:* Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant questions, affirming others, and adding relevant information.

Bridging: *Exchanging Information/Ideas:* Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant

questions, affirming others, adding relevant information, building on responses, and providing useful feedback.

ACADEMIC LANGUAGE REQUIREMENTS:

Specialized Vocabulary

- inches
- saree
- tape diagram

FORMAL AND INFORMAL ASSESSMENTS:

- (number talk) Students will think about the image in front of them and come up with something they notice or wonder to share with their partner and aloud to me.
- Students will work independently on the problem in activity 1 and come up with their own answer first.
- Students will have a productive discussion about the problem in activity 1 with their partner and compare answers.

ANTICIPATORY SET:

10:00 Warm up/Number talk (10min):

**will start right after our morning meeting on the carpet*

“Ok everyone I want you to go back to your desks, place your book on your desk and come right back to the carpet WITH NOTHING because I want to get started on our number talk right away and you don’t need your book”

“I want *all* eyes on the screen and I want you to think in your head to yourself about something you notice or what you wonder about these two pictures”

“What do you think the diagram and the ribbon could have in common?” (Maybe the 54 is cm or in, so 16 is how much of the ribbon is being cut off.)

“What could the question mark represent?”

10:10 Activity 1: Saree Silk Ribbon Necklaces (20min)

10:10 LAUNCH

“Thank you for sharing your thoughts about the picture, now let's figure out how a tape diagram can help you find the unknown number.”

“I want you to go get your math book, a pencil, and counting cubes from your desk and come straight back to the carpet because we’re doing math down here today”.

“Turn to page ____”

“What do you notice? What do you wonder? About this age, look at the two girls, look at the tape diagram.”

“Take one minute to think about it in your head”

“ok cookie (or milk) partner go first!, share what you were thinking”

“ok switch partners”

“These girls from India are wearing saree dresses. Sarees are usually worn by women and girls and are made by wrapping 5–7 meters of fabric in a special way.”

- “Many sarees are made from brightly colored silk, which is a soft fabric.”
- “Sometimes when sarees get too small or are worn out, they are cut into strips to make a saree ribbon.”

10:20 ACTIVITY

“Priya and her friends are planning to make saree silk ribbon necklaces. They want to make sure they get their measurements correct.”

*After I read the problem:

“Work by yourself to find the unknown value, the question mark first. I want to also see you put units, are we finding cm or inches? “I see the word inches here (underline word). Ok try and find the number that goes there, Go!”

“ok give me a thumbs up if you have an answer”

“Talk to your partner about what answer you got with your partner, check if they remembered to include the word inches, cookie partner go first, go!”

“How did the tape diagram help you think about what you needed to do to find the unknown value?”

I DO:

Warm up:

“Who wants to share what they wonder about the images? I will right your ideas on the board”

ACTIVITY:

“ I will read the problem and I want you guys to listen carefully to what it’s asking you to find”

“How long is primas ribbon NOW is what they want us to find out, since we don’t know that why there a question mark on this section of the tape diagram”

“ Does anyone need the question repeated, I will read it again”

WE ALL DO:

ACTIVITY:

“Let's both circle the question mark since that is the part of the tape diagram we are trying to find, yes?”

“Lets use our counters to figure out what is left of the 44 inch ribbon after 18 inches is cut off”.

CLOSURE:

“class class, yes yes”

“I want to ask you something before we go to the library”

“The first question is how did the tape diagram help you think about what you needed to do to find the unknown value?” (The diagram shows that 18 was being taken away, so I decided to subtract 18 from 44.)

RESOURCES AND MATERIALS:

- Doc cam
- 19 math books (their own)
- 19 pencils
- 19 bags of counters

- For all math lessons I followed the **Illustrative Math Curriculum** that my school followed, which provided me with scripted and detailed lessons.



- This is other student work from follow up lessons/small group:

Addition and Subtraction on the Number Line

Illustrative Mathematics

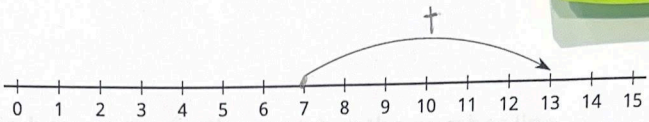
Section B: Practice Problems

1. Which equation does the number line represent? Explain your reasoning.

A. $7 + 6 = 13$

B. ~~$13 - 6 = 7$~~

Focus Student # 1



It is A. because the arrow is going 13

It is A. because the arrow is going [to the] 13"

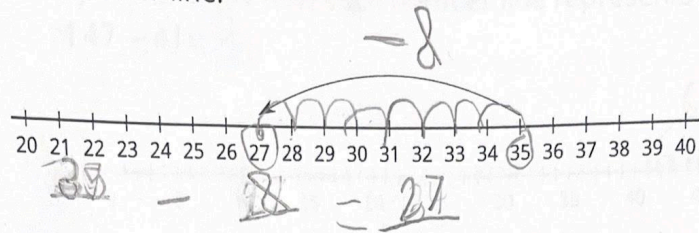
(From Unit 4, Lesson 7.)

Grade 2 Unit 4

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1

2. Here is a number line.



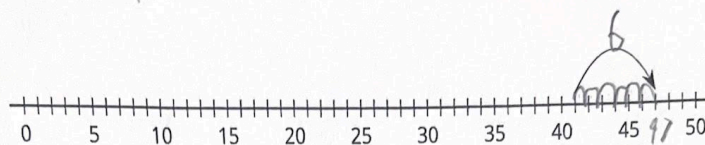
a. Write an equation that the number line represents.

b. Explain how your equation matches the number line.

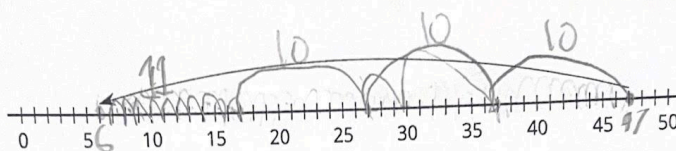
because I did 10m
"because it jumps (8 times)"

(From Unit 4, Lesson 8.)

3. a. Explain or show how each number line represents the value of $47 - 41 = 6$



$$41 + 6 = 47$$



$$47 - 41 = 6$$

- b. Which method do you prefer to calculate $47 - 41$?

I prefer Addition
"I prefer addition"

(From Unit 4, Lesson 9.)

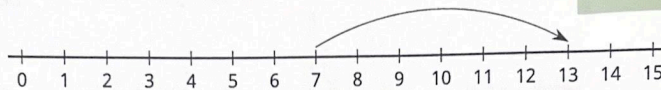
Section B: Practice Problems

1. Which equation does the number line represent? Explain your reasoning.

A. $7 + 6 = 13$

B. $13 - 6 = 7$

Focus
Student
2

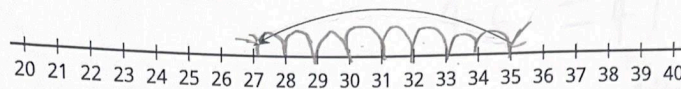


It is going to the 13

"It (the arrow) is going to the 13"

(From Unit 4, Lesson 7.)

2. Here is a number line.



a. Write an equation that the number line represents.

$$35 - 8 = 27$$



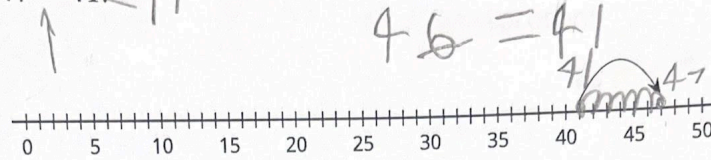
b. Explain how your equation matches the number line.

It matches the
matches

"It (the equation) matches the
matches (the number line)"

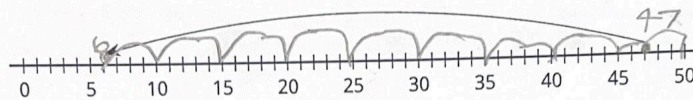
(From Unit 4, Lesson 8.)

3. a. Explain or show how each number line represents the value of $47 - 41 = 11$



$$47 - 9 = 6$$

$$47 - 9 = 6$$



- b. Which method do you prefer to calculate $47 - 41 = 11$

I prefer
subtraction

(From Unit 4, Lesson 9.) "I prefer subtraction"

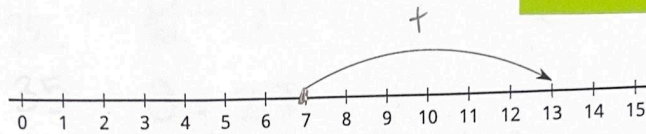
Section B: Practice Problems

1. Which equation does the number line represent?
reasoning.

A. $7 + 6 = 13$

B. ~~$13 - 6 = 7$~~

Focus
Student
#3

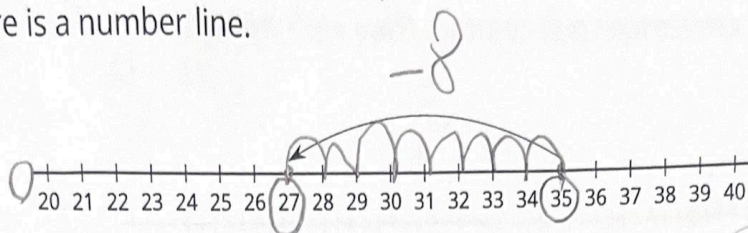


because I know that is
plus.

"because I know that it is plus"

(From Unit 4, Lesson 7.)

2. Here is a number line.



a. Write an equation that the number line represents.

$$\begin{array}{r} 35 \\ - 8 \\ \hline 27 \end{array}$$

$$35 - 8 = 27$$

b. Explain how your equation matches the number line.

because I know that
it is in the opposite
direction is in home.

(From Unit 4, Lesson 8.)

"because I know that it is
in the (left). Arrow is hopping."

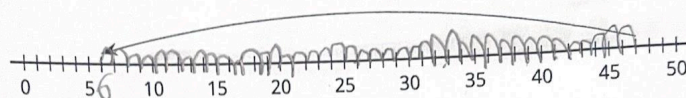
3. a. Explain or show how each number line represents the value of $47 - 41$.

$$\begin{array}{r} 47 - 41 \\ \hline 6 \end{array}$$



$$41 + 6 = 47$$

$$41 + 6 = 47$$



$$47 - 41 = 6$$

$$47 - 41 = 6$$

- b. Which method do you prefer to calculate $47 - 41$?

I prefer

plus.

"I prefer plus (addition)"

(From Unit 4, Lesson 9.)