Materials List:

- Multiply by 9 Pattern Sheet
- Problem sets from lessons 28-30
- whiteboards
- Student work sample images (template)
- timer

Eureka Math

3rd Grade
Module 7
Lesson 30

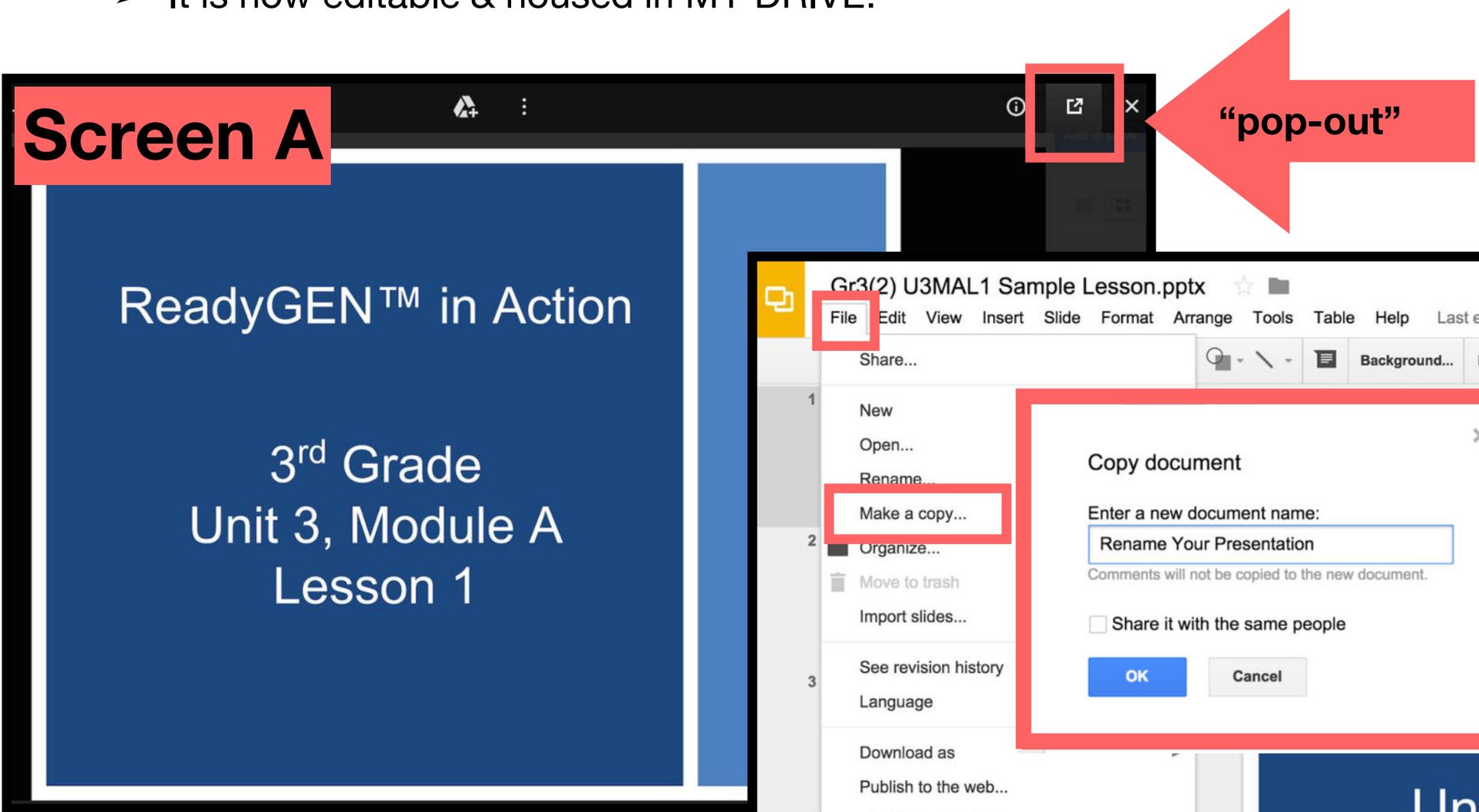
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

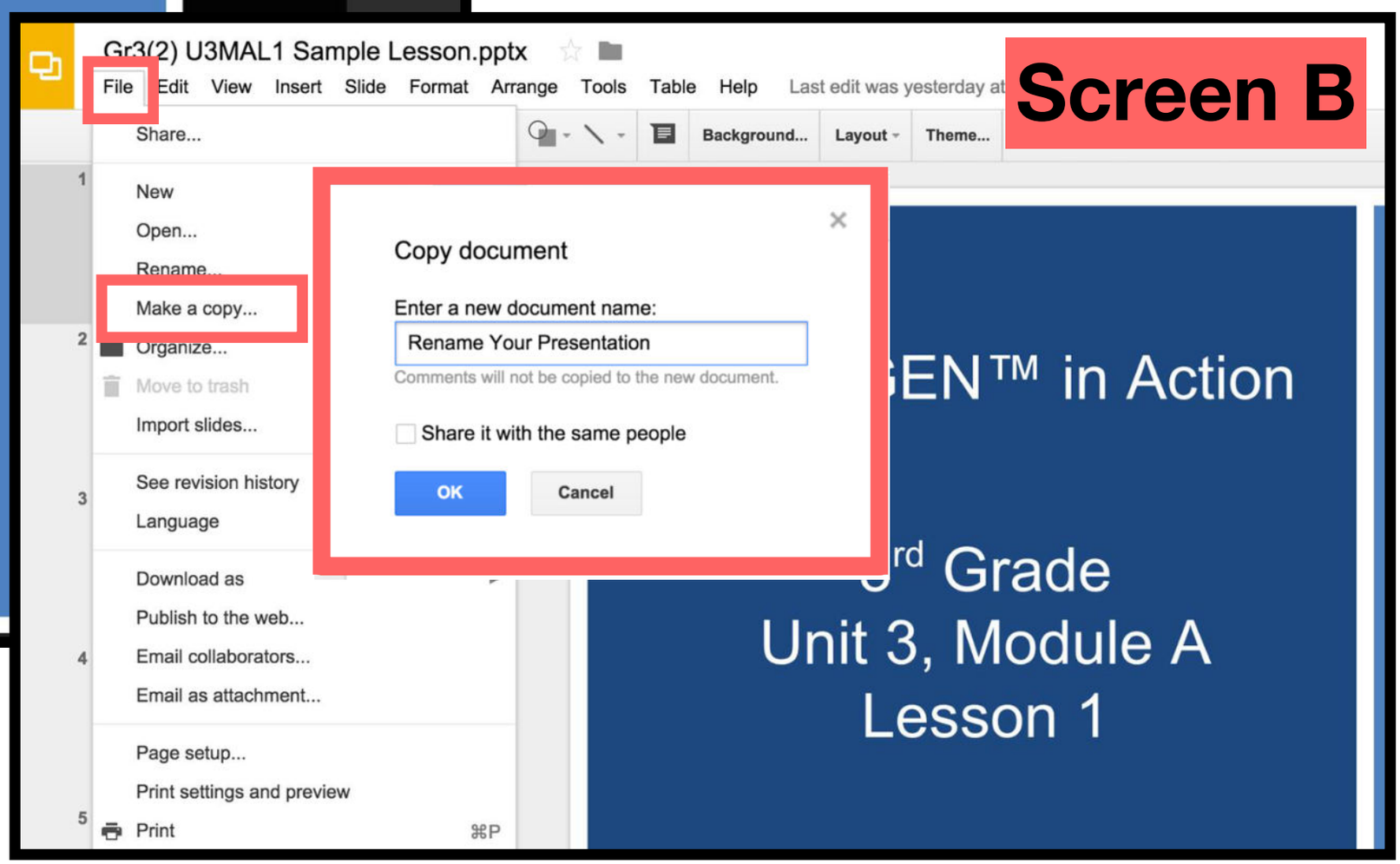
Directions for customizing presentations are available on the next slide.

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.



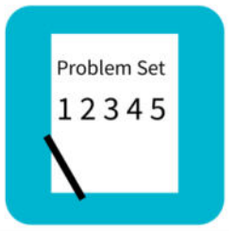


Icons

Read, Draw, Write

Learning Target

Personal White Board

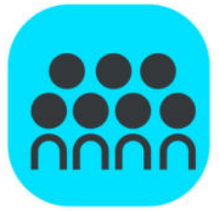


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

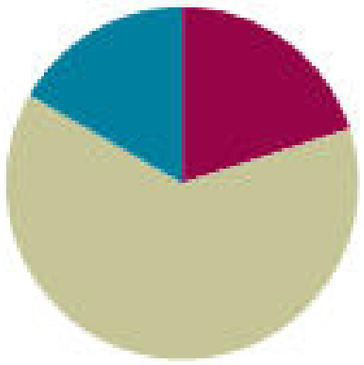
Small Group Time

Lesson 30

Objective: Share and critique peer strategies for problem solving.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Concept Development	(38 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can share and critique peer strategies for problem solving.

Fluency Practice

Multiply by 9 (5 minutes)

Let’s skip-count up by nines. I’ll raise a finger for each nine.

7x9 = ___

Let’s skip-count up by nines starting at 45. Why is 45 a good place to start?

Let’s see how we can skip-count down to find the answer, too. Start at 90 with 10 fingers, 1 for each eight.

Continue with the following sequence:

9 × 9

6 × 9

8 × 9

Fluency Practice

Multiply by 9 Sprint (2 minutes)

Multiply.

9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 6 = _____	9 x 7 = _____	9 x 8 = _____
9 x 9 = _____	9 x 10 = _____	9 x 5 = _____	9 x 6 = _____
9 x 5 = _____	9 x 7 = _____	9 x 5 = _____	9 x 8 = _____
9 x 5 = _____	9 x 9 = _____	9 x 5 = _____	9 x 10 = _____
9 x 6 = _____	9 x 5 = _____	9 x 6 = _____	9 x 7 = _____

Fluency Practice

Multiply and Divide (4 minutes)

$2 \times 2 = \_\_\_\_$

Say the multiplication sentence.

$3 \times 3 = \_\_\_\_$

$4 \times 4 = \_\_\_\_$

$5 \times 5 = \_\_\_\_$

Fluency Practice

Multiply and Divide (4 minutes)

Say the following multiplication sentence:

3 × 2 = ____

Flip it.

2 x 3 = ____

4 × 2 = ____
5 × 3 = ____
4 × 3 = ____

Fluency Practice

Multiply and Divide (4 minutes)

$4 \div 2 = \_\_\_$

Say the division sentence.

$15 \div 5 = \_\_\_$

$9 \div 3 = \_\_\_$

$24 \div 4 = \_\_\_$

Concept Development

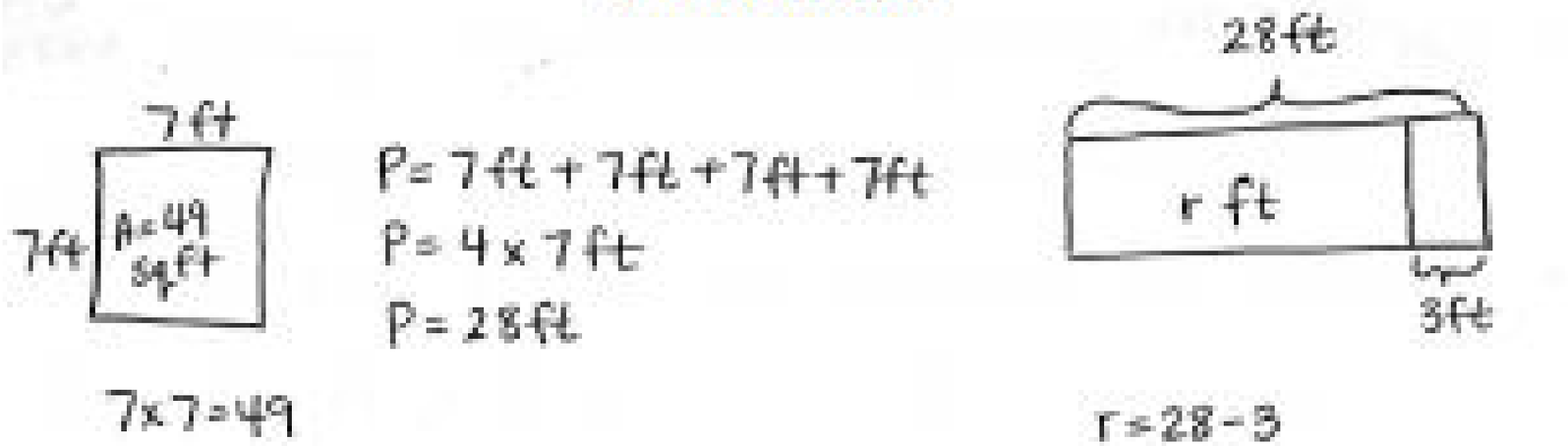
Part 1: Analyze sample student work for accuracy and efficiency. (40 minutes)

Jeremiah and Hayley use a piece of rope to mark a square space for their booth at the science fair. The area of their space is 49 square feet. What is the length of the rope that Jeremiah and Hayley use if they leave a 3-foot opening so they can get in and out of the space?

Let's look at and discuss some possible solutions for this problem.

Talk to your partner. What did Student A do to solve?

Student A



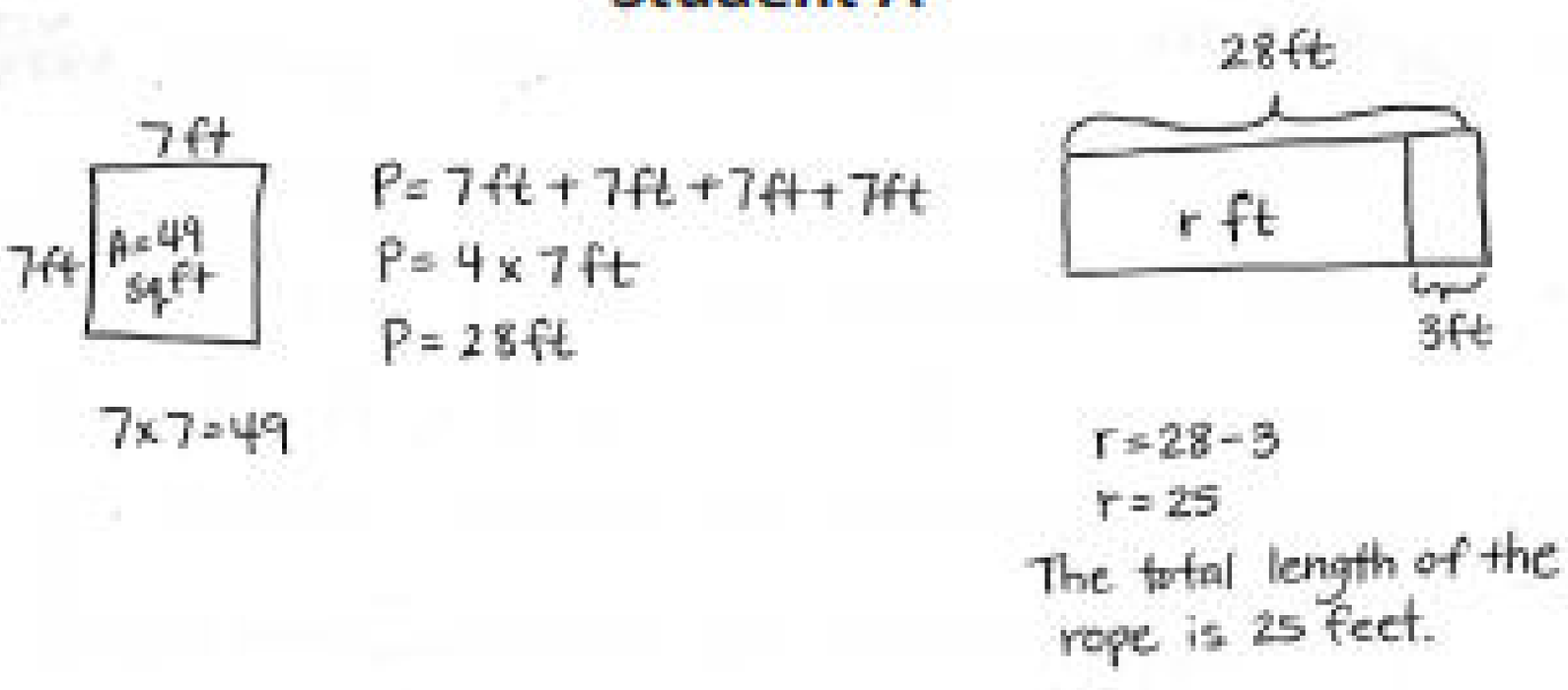
Concept Development

Part 1: Analyze sample student work for accuracy and efficiency. (40 minutes)

Other than getting the right answer, what did Student A do well?
Think about the following:

- Was the drawing helpful?
- What makes it helpful or unhelpful?
- Did Student A represent all the important information in his drawing? Why or why not?
- Was this drawing the best one to use? Why or why not?
- Can you retell the story using only the drawing and labels? Explain.
- How did he organize the information?

Student A

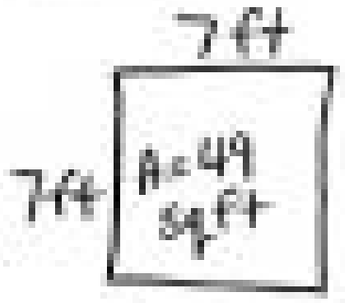


Concept Development

Part 1: Analyze sample student work for accuracy and efficiency. (40 minutes)

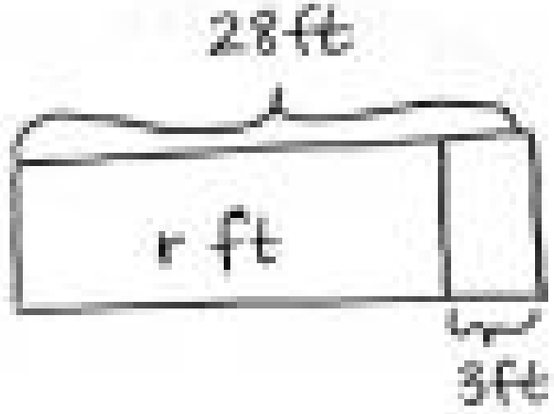
What suggestion would you make to Student A to improve his work?

Student A



7x7=49

P= 7ft + 7ft + 7ft + 7ft
P= 4 x 7 ft
P= 28ft



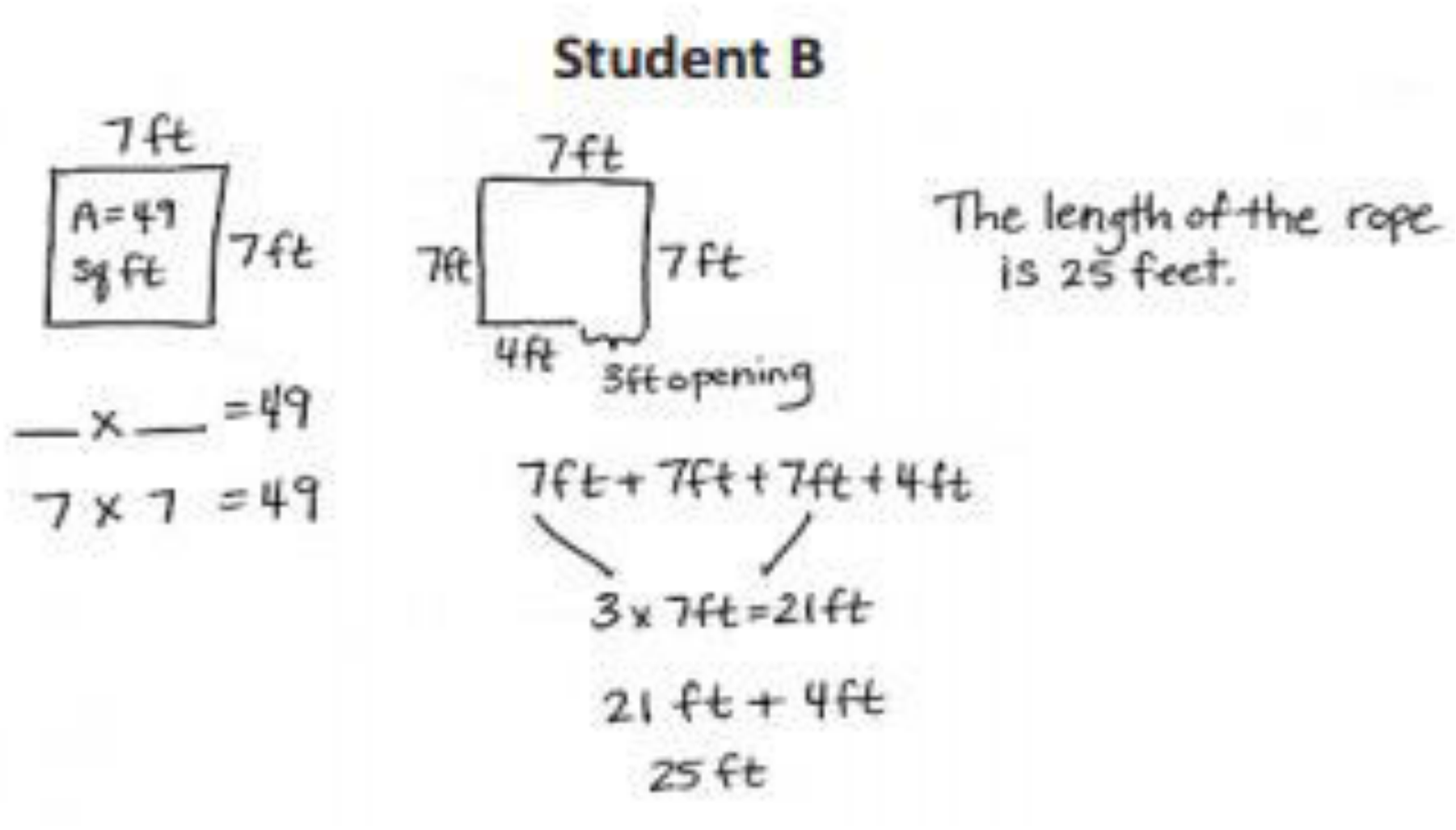
r = 28 - 3
r = 25

The total length of the rope is 25 feet.

Concept Development

Part 1: Analyze sample student work for accuracy and efficiency. (40 minutes)

Let's look at another student, Student B, who solved the same problem. What did this student do well? What could they improve?

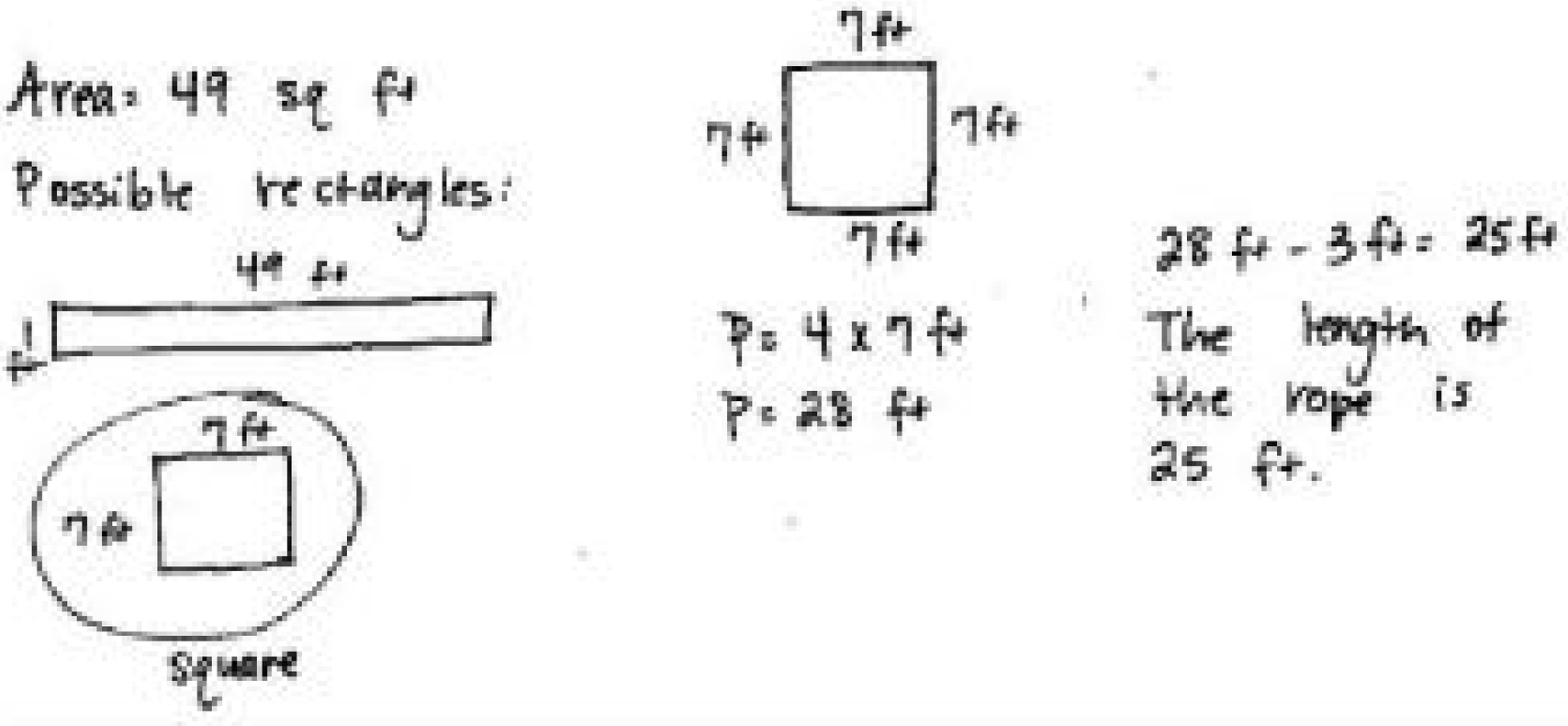


Concept Development

Part 1: Analyze sample student work for accuracy and efficiency. (40 minutes)

Let's look at third student, Student C, who solved the same problem. What did this student do well? What could they improve?

Student C



Concept Development

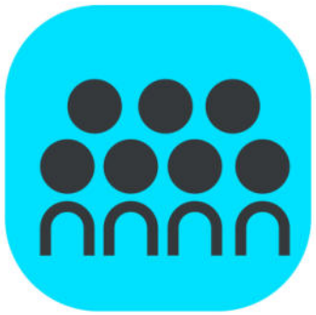
Part 2: Analyze peer work for accuracy and efficiency. (40 minutes)

Today, you will work in groups of four to share solutions and critique your classmates' work just as we did for the students on the previous slides.

You will take turns presenting their solutions to a problem from the Lesson 28 or 29 Problem Sets.

When a student finishes presenting, the other group members will take a few minutes to ask the presenter clarifying questions.

You might use questions similar to those that we asked ourselves about the previous students.



Debrief (10 minutes)

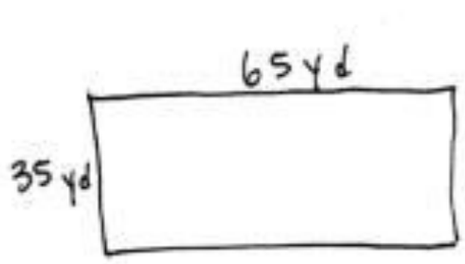
- How did today's Problem Set or critiquing tool help you analyze your classmates' work?
- How does having your work critiqued by your classmates improve your problem-solving skills?
- How does critiquing your classmates' work improve your problem-solving skills?
- What was difficult about today's group activity? Why was it difficult?
- What strategies did you see in your classmates' work that you might try in future problems?

Exit Ticket (3 minutes)

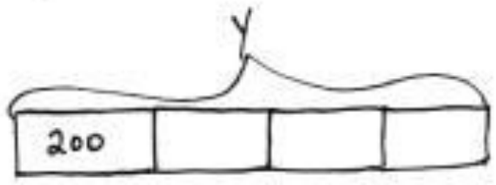
Name _____ Date _____

Jayden solves the problem as shown below.

The recreation center soccer field measures 35 yards by 65 yards. Chris dribbles the soccer ball around the field 4 times. What is the total number of yards Chris dribbles the ball?



P= 35 yd + 65 yd + 35 yd + 65 yd
P= 100 yd + 100 yd
P= 200 yd



y = 200 + 200 + 200 + 200
y = 800

Chris dribbles the ball a total of 800 yards.