# Lesson 8: More Questions about Scaled Bar Graphs

### Standards Alignments

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| --- | --- |
| Addressing | 3.MD.B.3 |

### Teacher-facing Learning Goals

* Solve one- and two-step “how many more” and “how many fewer” problems within 100, based on the data presented in scaled bar graphs.

### Student-facing Learning Goals

* Let’s solve problems using data shown on bar graphs.

### Lesson Purpose

The purpose of this lesson is for students to solve one- and two-step “how many more” and “how many fewer” problems, based on data presented in a scaled bar graph.

This lesson introduces Three Reads (MLR 6) to support students in making sense of and solving situations. In this lesson students continue to interpret graphs that represent quantities that are not exact multiples of the scale and require students to estimate values. As a result, answers may vary slightly. Accept all answers that align to reasonable estimates.

This lesson has a Student Section Summary.

### Access for:

###  Students with Disabilities

* Engagement (Activity 2)

###  English Learners

* MLR8 (Activity 2)

### Instructional Routines

MLR6 Three Reads (Activity 1), Number Talk (Warm-up)

### Lesson Timeline

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| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

Who got to do math today in class and how do you know? Identify the norms or routines that allowed those students to engage in mathematics. How can you adjust these norms and routines so all students do math tomorrow?

## Cool-down

(to be completed at the end of the lesson) 5min

Reading Time

### Student-facing Task Statement

A group of students were asked, “What is your favorite time to read?” Their responses are shown in this bar graph:



Use the graph to answer the questions.

1. How many fewer students like to read in the morning than in the afternoon? Show your thinking using expressions or equations.
2. How many more students like to read in the evening than in the morning or at lunchtime? Show your thinking using expressions or equations.

### Student Responses

1. 12. Sample responses: $23−11=12$
2. 7. Sample responses:
	* $44−\left(12+25\right)$
	* $44−10−20=14$
	* $14−2−5=7$