Eureka Math

4th Grade Module 1 Lesson 16

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Directions for customizing presentations are available on the next slide.



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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.
- \succ 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



















Manipulatives Needed







Lesson 16

Objective: Solve two-step word problems using the standard subtraction algorithm fluently modeled with tape diagrams, and assess the reasonableness of answers using rounding.

Suggested Lesson Structure

Fluency Practice
Application Problem
Concept Development
Student Debrief
Total Time

(12 minutes) (5 minutes) (30 minutes) (13 minutes) (60 minutes)





I can use solve two-step word problems using the standard subtraction algorithm fluently modeled with tape diagrams, and assess the reasonableness of answers using rounding.

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Sprint

Put your name on side A.

Hold your pencil in the air to show you are ready.

- When your teacher says, "Go", begin solving.
- Keep working to solve as many problems as you can.
- When your teacher says, "Stop", stop answering problems and hold your pencil in the air.

Listen and check your work as your teacher reads the correct answers.

Count how many problems you answered correctly and write them in the circle.

Follow the same steps for side B. On side B, try to solve more problems than you did on side A.



Compare Numbers 342,006 ____ 94,983

On your personal white boards, compare the numbers by writing the greater than, less than, or equal symbol.

- 7 thousands 5 hundreds 8 tens _____ 6 ten thousands 5 hundreds 8 ones
- 9 hundred thousands 8 thousands 9 hundreds 3 tens _____ 807,820.

Application Problem

For the weekend basketball playoffs, a total of 61,941 tickets were sold. 29,855 tickets were sold for Saturday's games. The rest of the tickets were sold for Sunday's games. How many tickets were sold for Sunday's games?



Subtraction Word Problem

A company has 3 locations with 70,010 employees altogether. The first location has 34,857 employees. The second location has 17,595 employees. How many employees work in the third location?

Read with me. Take 2 minutes to draw and label a tape diagram. Can you draw something? What can you draw?

Subtraction Word Problem

A company has 3 locations with 70,010 employees altogether. The first location has 34,857 employees. The second location has 17,595 employees. How many employees work in the third location?

Tell your partner what you understand and what you still do not understand.



Subtraction Word Problem

A company has 3 locations with 70,010 employees altogether. The first location has 34,857 employees. The second location has 17,595 employees. How many employees work in the third location?



Use your tape diagram to estimate the number of employees at the third location. Explain your reasoning to your partner.





Subtraction Word Problem

A company has 3 locations with 70,010 employees altogether. The first location has 34,857 employees. The second location has 17,595 employees. How many employees work in the third location?



Now, find the precise answer. Work with your partner to do so.



Subtraction Word Problem

Owen's goal is to have 1 million people visit his new website within the first four months of it being launched. Below is a chart showing the number of visitors each month. How many more visitors does he need in Month 4 to reach his goal?

Month	Month 1	Month 2	Month 3	Month 4
Visitors	228,211	301,856	299,542	

With your partner, draw a tape diagram. Tell your partner your strategy for solving this problem.Make an estimate for the number of visitors in Month 4. Explain your reasoning to your partner.





Subtraction Word Problem

Owen's goal is to have 1 million people visit his new website within the first four months of it being launched. Below is a chart showing the number of visitors each month. How many more visitors does he need in Month 4 to reach his goal?

Month	Month 1	Month 2	Month 3	Month 4
Visitors	228,211	301,856	299,542	



Find the total for the first 3 months. What is the precise sum? Compare the actual and estimated solutions. Is your answer reasonable?





Subtraction Word Problem

There were 12,345 people at a concert on Saturday night. On Sunday night, there were 1,795 fewer people at the concert than on Saturday night. How many people attended the concert on both nights?



Make an estimate of the solution. Explain your reasoning to your partner

Find the exact number of people who attended the concert on both nights. What is the exact sum? Compare the actual and estimated solutions. Is your answer reasonable?



Problem Set

A STORY OF UNITS

Lesson 16 Problem Set 4•1

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Date

Estimate first, and then solve each problem. Model the problem with a tape diagram. Explain if your answer is reasonable.

- 1. On Monday, a farmer sold 25,196 pounds of potatoes. On Tuesday, he sold 18,023 pounds. On Wednesday, he sold some more potatoes. In all, he sold 62,409 pounds of potatoes.
 - a. About how many pounds of potatoes did the farmer sell on Wednesday? Estimate by rounding each value to the nearest thousand, and then compute.

Debrief

- How did your estimate help you determine that your exact answer was reasonable in Problem 1?
- In Problem 2, how close was your actual answer to your estimate?
- Why was the estimate so much smaller than the exact answer in Problem 2?
- In Problem 3, to which place did you round? Why?
- How did your tape diagram help you solve Problem 5?
- How do you determine what place value to round to when finding an estimate?
- What is the benefit of checking the reasonableness of your answer?
- Describe the difference between rounding and estimating.

Exit Ticket

A STORY OF UNITS

Lesson 16 Exit Ticket 4-1

Name

Date _____

Quarterback Brett Favre passed for 71,838 yards between the years 1991 and 2011. His all-time high was 4,413 passing yards in one year. In his second highest year, he threw 4,212 passing yards.

 About how many passing yards did he throw in the remaining years? Estimate by rounding each value to the nearest thousand and then compute.

2. Exactly how many passing yards did he throw in the remaining years?