

(S) Multiply By 8 (1–5) (Pattern Sheet)

(S) Personal white board

Eureka Math

3rd Grade Module 3 Lesson 11

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Reflecting your Teaching Style and Learning Needs of Your Students

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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 11

Objective: Interpret the unknown in multiplication and division to model and solve problems.

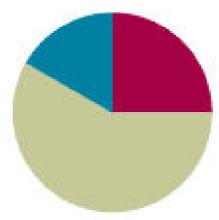
Suggested Lesson Structure

Fluency Practice (15 minutes	Fluenc	y Practice	(15 minutes
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Concept Development (35 minutes)

Student Debrief (10 minutes)

Total Time (60 minutes)





I can interpret the unknown in multiplication and division to model and solve problems.

Multiply By 8

Write $5 \times 8 =$

Let's skip-count by eights to find the answer.

I'll raise a finger for each eight.



Multiply By 8

Write
$$4 \times 8 =$$

Let's skip-count by eights to find the answer.

I'll raise a finger for each eight.



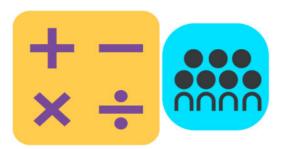
Multiply By 8

Let's practice multiplying by 8. Be sure to work left to right across the page.

A STORY OF UNITS

Lesson 11 Pattern Sheet 3 3

Multiply.

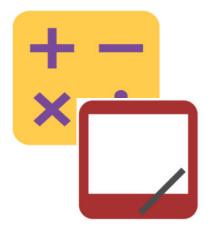


Group Counting

Sixes to 60

Sevens to 70

Nines to 90



Decompose the Multiplication Sentence

Write
$$8 \times 8 = (5 + ___) \times 8$$

On your personal white board, copy and fill in the equation



Problem 1: Interpret the unknown in multiplication.

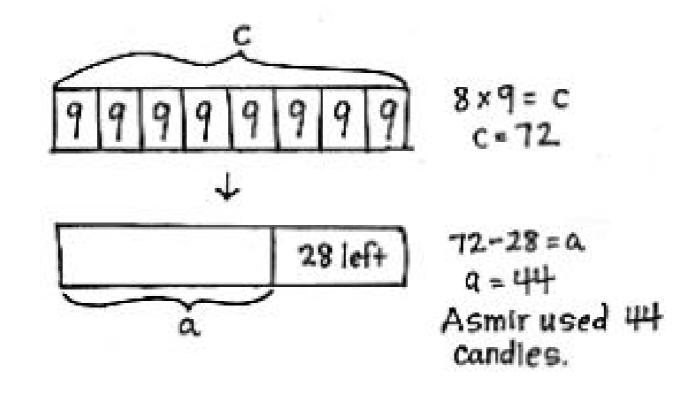
Asmir buys 8 boxes of 9 candles for his dad's birthday. After putting some candles on the cake, there are 28 candles left. How many candles does Asmir use?



Concept Development

Problem 1: Interpret the unknown in multiplication.

Asmir buys 8 boxes of 9 candles for his dad's birthday. After putting some candles on the cake, there are 28 candles left. How many candles does Asmir use?





Concept Development

Problem 2: Interpret the unknown in division.

The fabric store sells one meter of cloth for \$8. Maria buys some cloth that costs a total of \$56. She then uses 3 meters to sew a dress. How many meters of cloth does she have left?

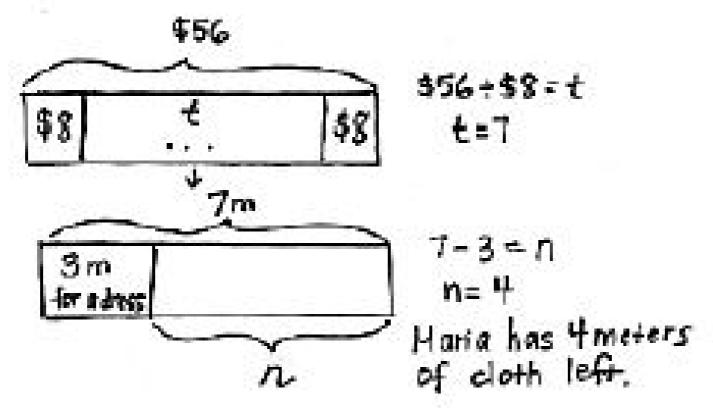
Draw a model to represent the problem. Choose letters to represent the unknowns.

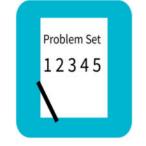


Concept Development

Problem 2: Interpret the unknown in division.

The fabric store sells one meter of cloth for \$8. Maria buys some cloth that costs a total of \$56. She then uses 3 meters to sew a dress. How many meters of cloth does she have left?







Problem Set

A STORY OF UNITS

Lesson 11 Problem Set

3.3

Name	Data
Name	Dale
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 Ms. Santor divides 32 students into 8 equal groups for a field trip. Draw a tape diagram, and label the number of students in each group as n. Write an equation, and solve for n.

2. Tara buys 6 packs of printer paper. Each pack of paper costs \$8. Draw a tape diagram, and label the total amount she spends as m. Write an equation, and solve for m.

Student Debrief

Lesson Objective: Interpret the unknown in multiplication and division to model and solve problems.

In Problem 1, did you solve to find the number of groups or the number of items in each group?

What equations can be used to solve Problem 1?

In Problem 4, how many parts did each pack need to be split into in order for each boy to get 1 part? (Two equal parts.)

Could we use that fact to solve the problem without first finding the total number of cards? Why or why not?

Problems 4–6 are multiple-step problems. Why is it useful to use different letters to represent two unknowns in the same problem?



Exit Ticket

A STORY OF UNITS

Lesson 11 Exit Ticket 305

Name	Date
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Erica buys some packs of rubber bracelets. There are 8 bracelets in each pack.

a. How many packs of rubber bracelets does she buy if she has a total of 56 bracelets? Draw a tape diagram, and label the total number of packages as p. Write an equation, and solve for p.

b. After giving some bracelets away, Erica has 18 left. How many bracelets did she give away?