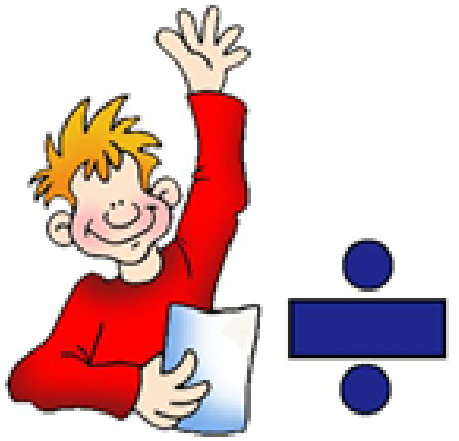
3-Digit by 1-Digit Division

November 3rd, 2014

Learning Goals:



Today I will be able to solve 3-digit by 1-digit division problems using the Area Model strategy.

Today I will be able to use the problem solving steps when completing word problems.

Our Agenda for Today...

First.....Review how to solve 3-digit by 1-digit division problems with **two-digit** quotients.

Next.....Learn how to solve 3-digit by 1-digit division problems with **three-digit** quotients!

Then.....Begin our tasks for the day.

Your Tasks...

Task 1: Complete independent practice—your independent activity was placed on your desk this morning. The answer key is on the whiteboard.

Task 2: Create a Paper Slide Show for one of the **word problems** you solve today!

Task 3: Can You Solve It? Take a look at a new division strategy!

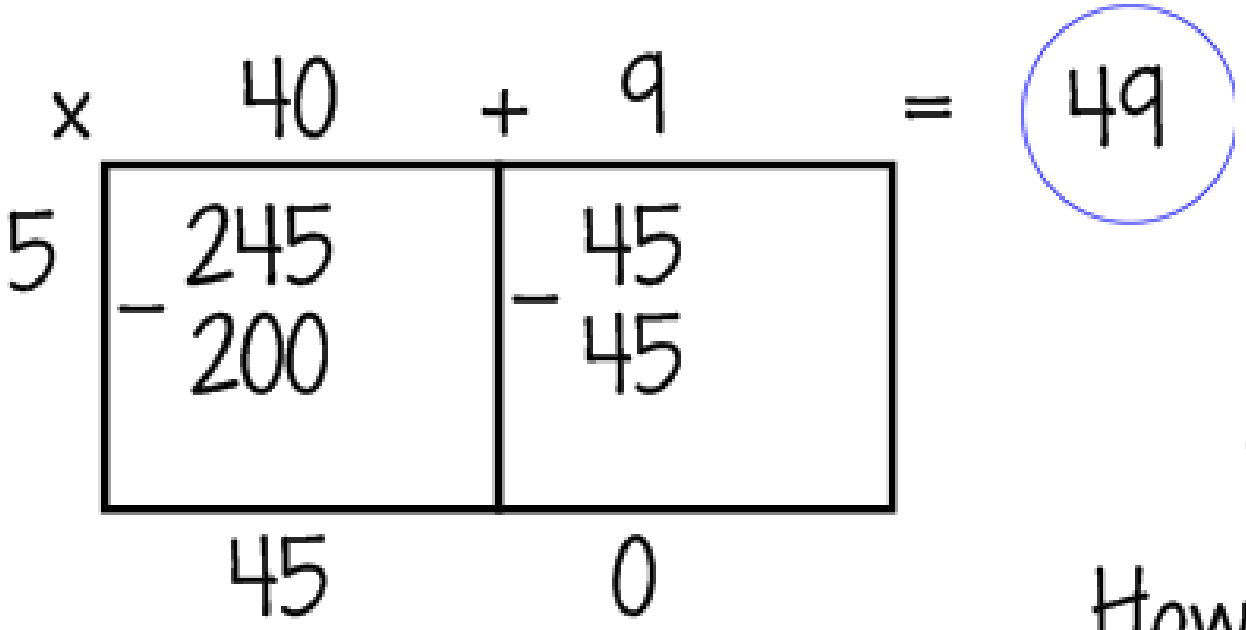
Let's review what we learned on Friday...

245 divided by 5

Solve this problem
on your whiteboard!

245 divided by 5

Answer: 49



Reminder:
How can we check our answer?

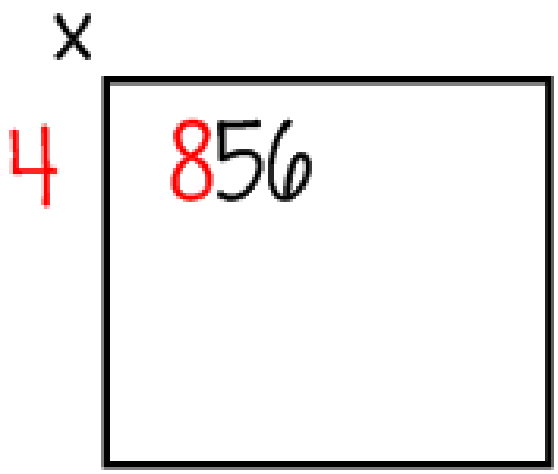
5 x 49

Now let's learn how to solve a division problem that has a....

THREE-DIGIT quotient!

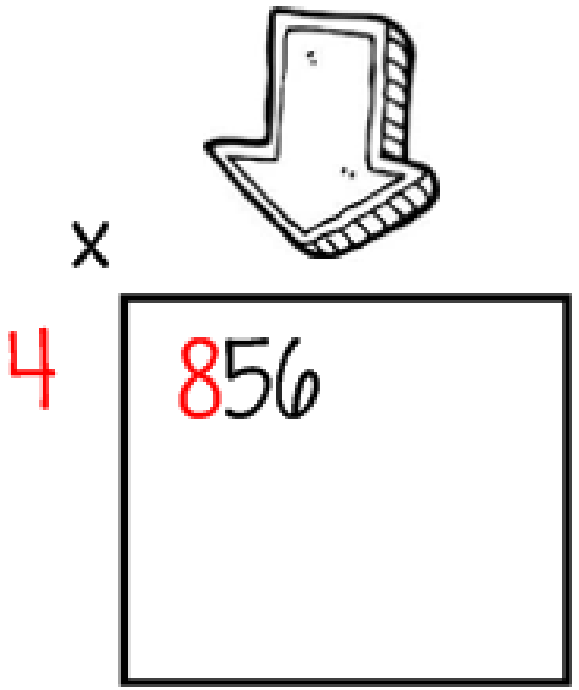
856 divided by 4

Let's start by setting our problem up using the Area Model. Please do this on your whiteboard.



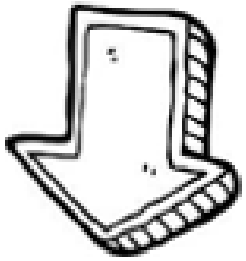
What do you notice about the divisor and the digit in the hundreds place in the dividend?

The divisor is smaller than the digit in the hundreds place. This means you can start in the hundreds place and look at the number 8 instead of looking at the number 56.



Let's compare this problem to the problem we just solved...

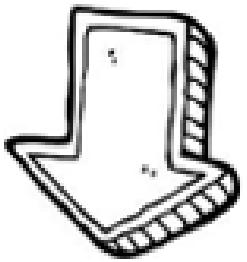
The divisor is smaller than the digit in the hundreds place.



x

4 856

The divisor is larger than the digit in the hundreds place.



x

5 245

Because the divisor was larger than the digit in the hundreds place, we had to look at the number 24 instead of the number 2.

Let's begin solving....Ask yourself, "How many groups of 4 are in 800?" Remember use groups of 10, or numbers that end in zero!

x	
4	856

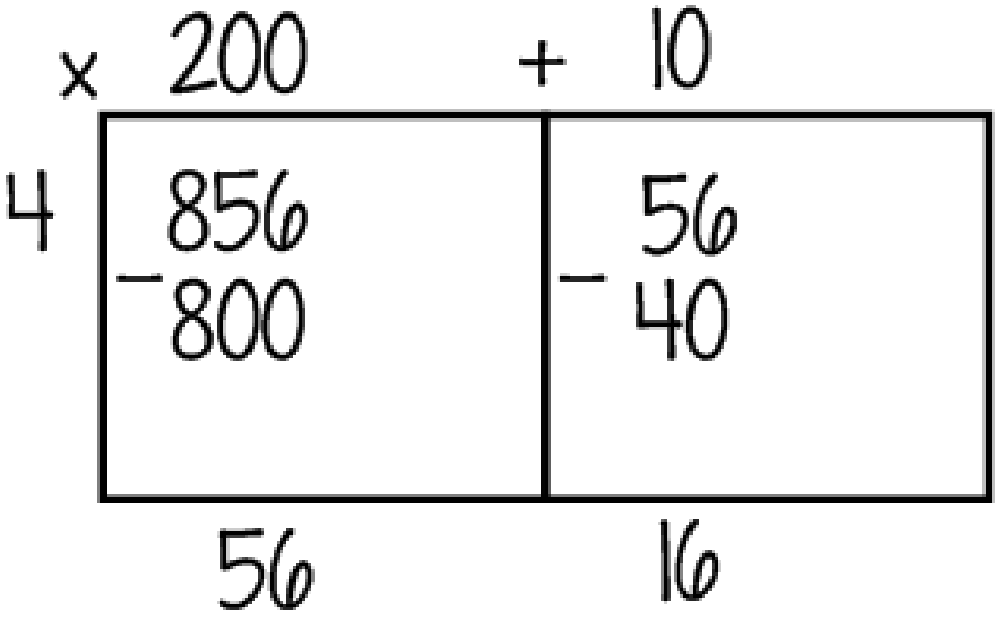
Number Menu

4 x 10 = 40	4 x 100 = 400
4 x 20 = 80	4 x 200 = 800
4 x 30 = 120	4 x 300 = 1200

I can add a zero!

Remember we can start in the hundreds place because 4 is smaller than 8.

Next Rectangle...



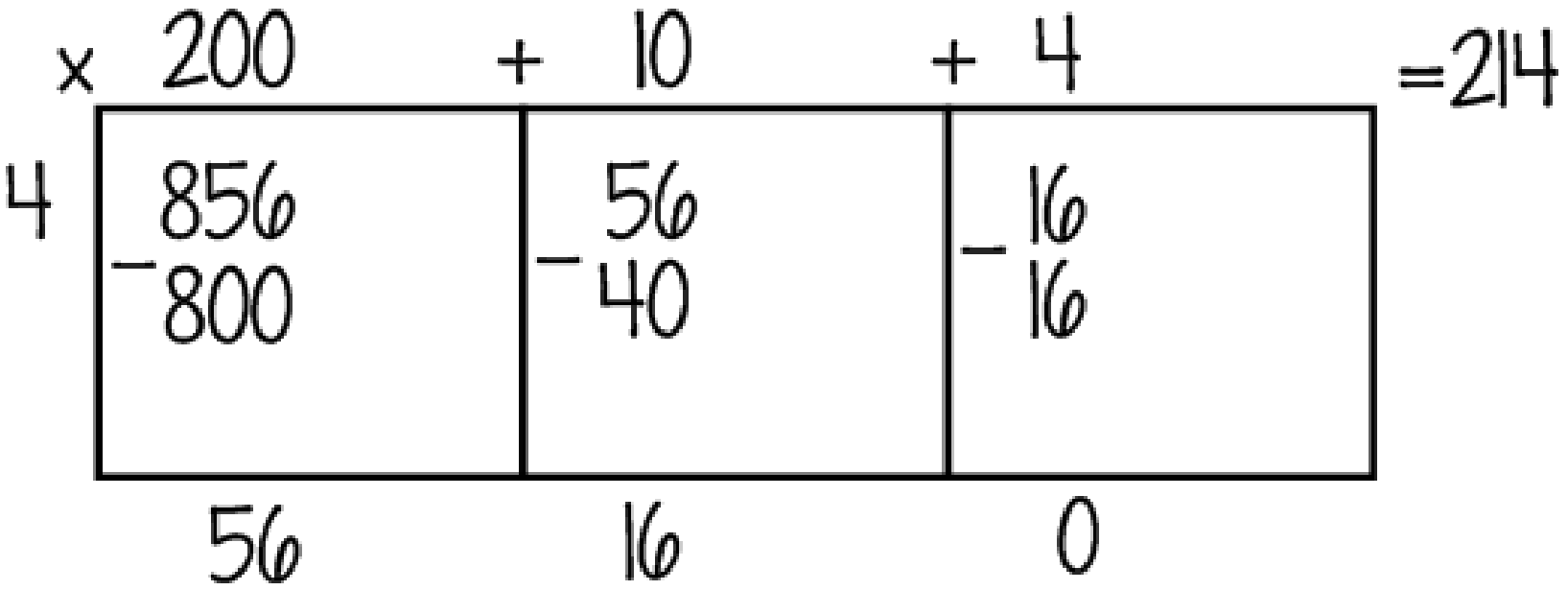
Number Menu

$4 \times 9 = 36$

$4 \times 10 = 40$

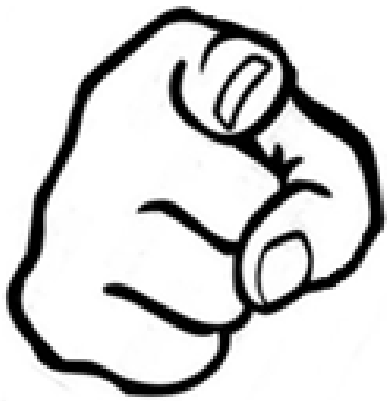
$4 \times 20 = 60$

Last Rectangle...



Number Menu

I know my facts! I know that 4 is a factor of 16. I don't need to write out my number menu.



Now I want you to try one on your own....do the following problem on your whiteboard.

652 divided by 4

Let's go over the answer together....

4 | 652

Number Menu

Time to Practice!

Task 1: Complete independent practice—your independent activity was placed on your desk this morning. Make sure you use the Problem Solving Steps!

Task 2: Create a Paper Slide Show for one of the **word problems** you solve today! The outline is by the supply cubbies.

Task 3: Can You Solve It? Take a look at a new division strategy!