MATH NEWS

LAFAYETTE PARISH SCHOOL SYSTEM

Grade 3, Module 1, Topic F — Fall 2014

3rd Grade Math

Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 1 of Eureka Math (Engage New York) covers Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10. This newsletter will discuss Module 1, Topic F.

Topic F Distributive Property and Problem Solving Using Units of 2 – 5 and 10

Vocabulary Words

- Distributive Property
- Unit

Things to Remember!!!

A **unit** is a group of the same items.
If you have 7 apples, the unit is apples because it is a group of the same thing. In math we can use numbers as units.
3 + 3 + 3 + 3 + 3 + 3 + 3 is the same as 7 threes. There are 7 of the same number (3).

The **distributive property** says that multiplying a number by a group of numbers added together is the same as doing each multiplication separately.

$$5 \times 5 = (3 + 2) \times 5$$
$$= (3 \times 5) + (2 \times 5)$$
$$= 15 + 10$$
$$= 25$$

Objective of Topic F

1. Apply the distributive property to decompose units.
2. Solve two-step word problems involving multiplication and division and assess the reasonableness of answers.
3. Solve two-step word problems involving all four operations and assess the reasonableness of answers.

Focus Area– Topic F

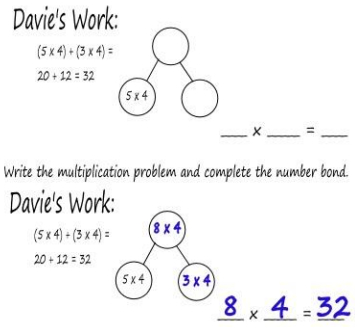
Distributive Property and Problem Solving Using Units of 2-5 and 10

Davie used the distributive property to solve a multiplication problem. Look at his work below, write the multiplication problem Davie solved and complete the number bond.

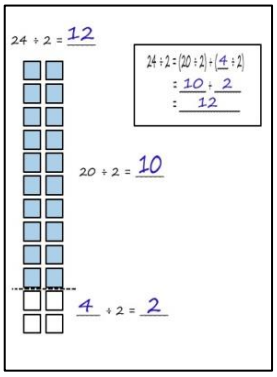
(5 x 4) + (3 x 4) =

Davie adds 5 fours and 3 fours to get his answer.
5 fours + 3 fours = 8 fours

(5 + 3) x 4 = 8 x 4 = 32



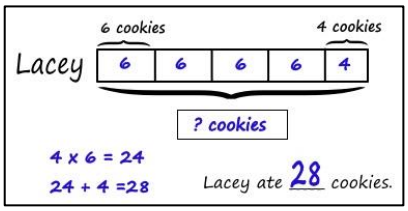
Complete the equation below to solve 24 ÷ 2 = _____.



Students will see the same concepts when dividing as they did when multiplying. Students will use smaller facts to solve the larger fact. 24 can be seen as (20 + 4). They will divide the array to show 20 blocks and 4 blocks. 20 divided by 2 is 10, 4 divided by 2 is 2. 10 plus 2 is 12.

Students will begin to solve two step word problems using tape diagrams.

Lacey eats 6 cookies each day at school. On Friday, she drops 2 cookies and only eats 4. Write and solve an equation to show the total number of cookies Lacey eats this week.



We go to school for 5 days a week. Lacey has 6 cookies to eat each day, but on Friday she drops some. So for 4 out of the 5 days she ate 6 cookies. 4 x 6 = 24. On Friday she only ate 4 cookies, 24 + 4 = 28.