

MATH NEWS

Grade 1, Module 4, Topic F

1st Grade Math

Module 4: Place Value, Comparison, Addition & Subtraction to 40

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 4 of Eureka Math (Engage New York) covers Place Value, Comparison, Addition and Subtraction to 40. This newsletter will discuss Module 4, Topic F.

Topic E. Addition of Tens and Ones to a Two-Digit Number

Students will begin to focus on interpreting numbers with two-digit such as 25 as 1 ten and 15 ones.

$$\begin{array}{r} 25 = \quad 2 \text{ tens} \quad 5 \text{ ones} \\ \quad \quad 1 \text{ ten} \quad 15 \text{ ones} \\ \quad \quad 0 \text{ tens} \quad 25 \text{ ones} \end{array}$$

Students will gain an understanding of place value and how numbers can be represented in various ways.

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tens	ones	tens	ones
2	18	3	8

OBJECTIVE OF TOPIC F

- 1 Interpret two-digit numbers as tens and ones including cases with more than 9 ones.
- 2 Add a pair of two-digit numbers when the ones digits have a sum less than or equal to 10.
- 3 Add a pair of two-digit numbers when the ones digits have a sum greater than 10.
- 4 Add a pair of two-digit numbers with varied sums in the ones.

Focus Area- Topic F

Addition of Tens and Ones to a Two-Digit Number

Students interchangeably add sets of two-digit numbers where the ones digit produces a sum less than or equal to 10. For example, when adding $24 + 16$, students decompose the second addend into 10 and 6. They then add 10 to 24, making 34, and then add the remaining ones. Students will also practice adding ones to the first addend and then adding the remaining 10.

$$\begin{array}{r} 24 + 16 = ? \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 10 \quad 6 \\ 24 + 10 = 34 \\ 34 + 6 = 40 \end{array}$$

$$\begin{array}{r} 24 + 16 = ? \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 6 \quad 10 \\ 30 + 10 = 40 \end{array}$$

Students add tens and ones when the one-digit has a sum greater than 10 such as $19 + 15$. Students continue to decompose the second addend alternating between adding on the ten first and making the next ten.

$$\begin{array}{r} 19 + 15 = ? \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 10 \quad 5 \\ 19 + 10 = 29 \\ 29 + 5 = 34 \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 1 \quad 4 \end{array}$$

$$\begin{array}{r} 19 + 15 = ? \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 1 \quad 14 \\ 19 + 1 = 20 \\ 20 + 14 = 34 \\ \quad \quad \quad \swarrow \searrow \\ \quad \quad 10 \quad 4 \end{array}$$

Students will practice adding two-digit problems using the arrow way.

$$\begin{array}{r} 19 + 15 = ? \\ 19 \xrightarrow{+1} 20 \xrightarrow{+10} 30 \xrightarrow{+4} 34 \end{array}$$