Oak Park Elementary School District 97

MATH NEWS

Grade 5 | Module 3 | Topic A | Equivalent Fractions

Welcome

This document is created to give parents and students a better understanding of the math concepts found in the Eureka Math (© 2013 Common Core, Inc.) that is also posted in the Engage New York material taught in the classroom. Grade 5 Module 3 of Eureka Math (Engage New York) covers Addition and Subtraction of Fractions. This newsletter will address making equivalent fractions.

Objectives

- Make equivalent fractions with the number line, the area model, and numbers.
- Make equivalent fractions with sums of fraction with like denominators.

Words to Know

- Equivalent Fraction
- Vertically
- Horizontally
- Numerator
- Denominator
- Expressions

Online Practice

Visit www.zearn.com for extra practice as well!

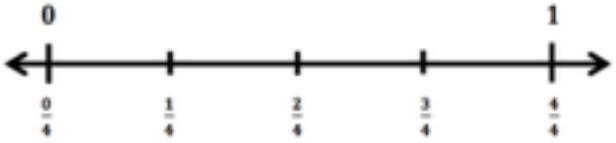
Important Information

Things to Remember

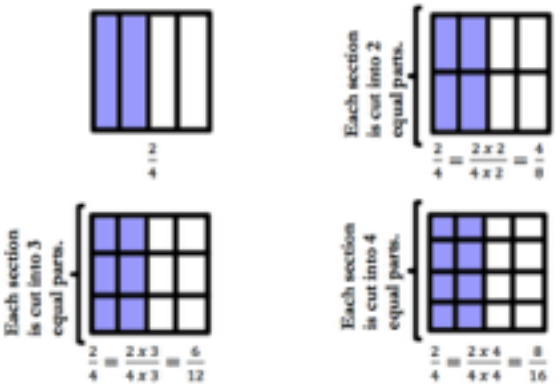
Equivalent Fraction: fractions that have the same value, even though they may look differently. Example: $\frac{1}{2}$ and $\frac{4}{8}$
Numerator: A number written above the line in a common fraction to indicate the number of parts to of the whole
Denominator: The number below the line in a fraction, indicating the number of equal parts into which one whole is divided.
Vertically: ↕ Horizontally: ↔

Module 3: Addition and Subtraction of Fractions

Mark 0 and 1 above the number line and $\frac{0}{4}, \frac{1}{4}, \frac{2}{4}, \frac{3}{4}$ and $\frac{4}{4}$ below the number line.



To find fractions equivalent to $\frac{2}{4}$, draw three **vertical** lines in each rectangle creating four parts. Shade in two sections to create the fraction $\frac{2}{4}$. Now partition with **horizontal** lines to show the **equivalent fractions** $\frac{4}{8}, \frac{6}{12}$, and $\frac{10}{20}$.



Example Problems

Show the expression on a number line then solve.

$\frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \frac{3}{6}$

$3 \times \frac{1}{6} = \frac{3}{6}$

Express the fraction as the sum of two or three equal fractional parts. Rewrite each as a multiplication equation.

$\frac{24}{5} = \frac{12}{5} + \frac{12}{5}$ $\qquad$ $\frac{24}{5} = 2 \times \frac{12}{5}$

OR

$\frac{24}{5} = \frac{8}{5} + \frac{8}{5} + \frac{8}{5}$ $\qquad$ $\frac{24}{5} = 3 \times \frac{8}{5}$

Express each of the following as the **sum of a whole number and a fraction.**

$\frac{14}{3} = \frac{3}{3} + \frac{3}{3} + \frac{3}{3} + \frac{3}{3} + \frac{2}{3}$

$= 1 + 1 + 1 + 1 + \frac{2}{3}$

$= 4 + \frac{2}{3}$

$= 4\frac{2}{3}$

$\frac{34}{9} = \frac{9}{9} + \frac{9}{9} + \frac{9}{9} + \frac{7}{9}$

$= 3 \times \frac{9}{9} + \frac{7}{9}$

$= 3 \times 1 + \frac{7}{9}$

$= 3 + \frac{7}{9}$

$= 3\frac{7}{9}$

Rachel cut six equal lengths of yarn. Each piece was 4 sevenths of a foot long. How many feet of yarn did she cut? Express your answer as the sum of a whole number and the remaining fractional part.

$\frac{4}{7} + \frac{4}{7} + \frac{4}{7} + \frac{4}{7} + \frac{4}{7} + \frac{4}{7} = \frac{24}{7}$

$\frac{24}{7} = \frac{7}{7} + \frac{7}{7} + \frac{7}{7} + \frac{3}{7}$

$= 3 \times \frac{7}{7} + \frac{3}{7}$

$= 3 \times 1 + \frac{3}{7}$

$= 3\frac{3}{7}$

Flipped Learning

Flipped learning is a great way to review topics that your student is learning in the classroom. The following are links to videos that give detailed explanations for each lesson in this topic.

Lesson 1: https://www.youtube.com/watch?v=hdEM1x5TmTE

Lesson 2: https://www.youtube.com/watch?v=L96zujfLPok

Homework Help

Looking for assistance for to help complete nightly homework? Check out the following website to get digital copies of homework, as well as detailed explanations in video format: http://www.oakdale.k12.ca.us/cms/page_view?