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## WOOT MATH OVERVIEW!

At Woot Math, we are passionate about helping teachers help their students become algebra-ready. We provide engaging instructional resources, specifically focused on rational numbers.

Woot Math is designed to support the way you work in the classroom. It can be used in a variety of blended learning settings including a classroom rotation model, media center or computer lab, after school, and extended learning opportunities. Teachers use Woot Math to fill gaps, stretch advanced students, and deepen conceptual understanding for whole class or small group instruction.


## GRADE 7!

## ANALYZING PROPORTIONAL RELATIONSHIPS

Students represent proportional and non-proportional situations using diagrams, tables, coordinate plane, equations, and real-world situations.

Students are asked to visualize relationships between quantities and recognize if they are proportional or non-proportional.
Students explore a variety of representations to determine if a situation is proportional or not.
7.RP.1, 7.RP.2A, 7.RP.2B

## GRADE 6

## FRACTION REFRESHER III

Students review core fraction learning objectives from grades 3-5.
5.NF.A.1, 5.NF.A.2, 4.NF.A.1, 4.NF.A.2, 4.NF.A.3, 4.NF.A.4, 3.NF.A. 1

## ADVANCED FRACTION DIVISION

Students divide fractions and solve word problems involving division of fractions using real-world contexts, fraction bars, fraction circles, and sets and interpret the results.
6.NS. 1

MAKING SENSE OF RATIOS
Students use visual models including a paint mixer to explore and understand the concept of ratios.

Students use ratio and proportional reasoning to solve real-world problems.
Students understand the use of mathematical language to describe a relationship between two quantities.
6.RP.A.1, 6.RP.A.3, 6.RP.A.3.A

## REASONING WITH RATIOS \& RATES

Students understand the concept of unit rate.
6.RP.A.2, 6.RP.A.3, 6.RP.A.3.A, 6.RP.A.3.B, 6.RP.A. 1

## CONNECTING WITH NEGATIVE NUMBERS

Students use the number line and real-world contexts to make sense of ordering positive and negative numbers in relation to zero.
Students make sense of numbers and their opposites by modeling with a number line.
6.NS.C.6, 6.NS.C.6.A, .6.NS.C.6.B, 6.NS.C.6.C, 6.NS.C. 5

ORDERING \& ABSOLUTE VALUE
Students make connections between positive and negative numbers and their distances from zero.

Students order positive and negative numbers based on their relative position on the number line.
6.NS.C.7, 6.NS.C.7.A, 6.NS.C.7.B, 6.NS.C.7.C, 6.NS.C. 6

## GRADE 5.

## FRACTION REFRESHER II

Students review fraction learning objectives from grades 3-4.
4.NF.A.1, 4.NF.A.2, 3.NF.A.1, 3.NF.A. 3

## ADVANCED FRACTION ADDITION

Students add fractions with unlike denominators and simplify answers using fraction circles, fraction bars, and real-world contexts.
5.NF.A.1, 5.NF.A.2, 4.NF.B.3, 4.NF.B.3.A

## ADVANCED FRACTION SUBTRACTION

Students subtract fractions with unlike denominators and simplify answers using fraction circles, fraction bars, and real-world contexts.
5.NF.A.1, 5.NF.A.2, 4.NF.B.3, 4.NF.B.3.A

## ADVANCED FRACTION MULTIPLICATION

Students multiply fractions using sets, fraction circles, rectangular models, and real-world contexts.
5.NF.B.6, 5.NF.B.5, 5.NF.B.5.A, 5.NF.B.5.B, 5.NF.B.4, 5.NF.B.4.A, 5.NF.B.4.B, 4.NF.B.4

## DIVISION OF FRACTIONS

Students divide fractions by whole numbers and whole numbers by fractions using real-world contexts, fraction bars, fraction circles, and sets.
5.NF.B.7, 5.NF.B.7.A, 5.NF.B.7.B, 5.NF.B.7.C, 5.NF.B.3

## GRADE 4

## FRACTION REFRESHER I

Students review fraction learning objectives from grades 3.
3.NF.A.1, 3.NF.A.2, 3.NF.A. 3

## ADVANCED ORDERING FRACTIONS

Students compare and order fractions with unlike denominators using a variety of models and strategies.

Students compare fractions to benchmarks such as $1 / 2$.
4.NF.A.2, 3.NF.A.3, 3.NF.A.3.D

## EQUIVALENT FRACTIONS

Students use bars, number line, and real-world contexts to determine if two fractions are equivalent and to build equivalent fractions. Students determine how many objects in a set are equal to $1 / 2,1 / 3,1 / 4$ of the set.
4.NF.A.1, 3.NF.A.3: 3.NF.A.3.B

## FRACTIONS IN SIMPLEST FORM

Students use fraction bars, number line, and real-world contexts to express fractions in simplest form.
4.NF.A.1, 3.NF.A. 3

## MIXED \& IMPROPER FRACTIONS

Students use fraction circles, bars, number line, and real-world contexts to express fractions as mixed numbers and improper fractions.
4.NF.A.B.3, 4.NF.A.B.3.B

## FRACTION ADDITION \& SUBTRACTION

Students add and subtract fractions and mixed numbers with like denominators using fraction circles, fraction bars, and real-world contexts.
4.NF.B.3, 4.NF.B.3.A, 4.NF.B.3.C, 4.NF.B.3.D

MULTIPLICATION OF FRACTIONS
Students solve word problems involving the multiplication of a fraction by a whole number using fraction circles, sets, real-world contexts, and number line. 4.NF.B.4, 4.NF.B.4.A, 4.NF.B.4.C

MAKING SENSE OF DECIMALS
Students use visual models including $1 \times 10$ and $10 \times 10$ grid models to explore and name tenths and hundredths.

Students compose and decompose decimals to build tenths from hundreds, and to rename a given decimal into tenths and hundredths.

Students compare decimals by reasoning about their size, comparing them to benchmark about place value, and using visual models.
4.NF.C.5, 4.NF.C.6, 4.NF.C. 7

## GRADE 4 CONTINUED!

## DECIMALS ON THE NUMBER LINE

Students locate and name tenths and hundredths on the number line using visual models, place value, and reasoning about relative size.
4.NF.C.5, 4.NF.C.6, 4.NF.C. 7

## GRADE 3.

## MAKING SENSE OF FRACTIONS

Students use visual models to name fractions as a/b where a is how many parts are represented and $b$ is how many equal-sized parts are in the whole. The whole is equal to whole fraction circles, other fractions, and sets of objects.

Students determine if two fractions are equivalent if they are the same size. 3.NF.A.1, 3.NF.A.3, 3.NF.A.3.A

## ORDERING FRACTIONS

Students use fraction circles, bars, and real world contexts to compare and order two fractions with the same numerator or denominator by reasoning about their size.
3.NF.A.3, 3.NF.A.3.B, 3.NF.A.3.D

FRACTIONS ON A NUMBER LINE
Students understand a fraction as a number on the number line, label a number line using fraction notation, and place fractions on a number line in a variety of real-world contexts. Fractions are less than 1, between 1 and 2, and whole numbers written in fraction form.
3.NF.A.2, 3.NF.A.2.A, 3.NF.A.2.B, 3.NF.A.3, 3.NF.A.3.C

## CONTACT US.

We would love to hear from you with any questions, comments, concerns, special requests, or other feedback that you might have.

You can reach us at:

- support@wootmath.com
- 1-855-WOOT-MATH (1-855-966-8628)
- On twitter at @wootmath

For additional help, please refer to wootmath.com/support


