

## Grade 6 Curriculum 2019-2020

Concepts covered for the 6<sup>th</sup> grade.

### Chapter 1: Number properties and decimals.

- Properties of operations
- Order of operations
- Understanding decimals
- Adding and subtracting decimals
- Multiplying decimals
- Dividing decimals

### Chapter 2: Expressions and Equations.

- Variables and expressions
- Writing algebraic expressions
- Solving addition equations
- Solving subtraction equations
- Solving multiplication and division equations

### Chapter 3: Number theory.

- Divisibility
- Exponents
- Prime numbers and prime factorization
- Greatest common factor
- Least common multiple
- Distributive property
- Simplifying algebraic expressions

### Chapter 4: Fraction operations.

- Adding fractions and mixed numbers
- Subtracting fractions and mixed numbers
- Multiplying fractions and mixed numbers
- Dividing fractions and mixed numbers
- Equations with fractions

### Chapter 5: Ratios and percent.

- Ratios
- Unit rates
- Equivalent ratios and rates
- Using ratios to convert measurements
- Understanding percent
- Percent, fraction, decimal
- Finding percent of a number
- Finding the whole

## **Chapter 6: Integers and rational numbers.**

- Exploring integers
- Comparing and ordering integers
- Rational numbers
- Comparing and ordering rational numbers
- Inequalities
- Solving one-step inequalities

## **Chapter 7: The Coordinate Plane.**

- Points in the coordinate plane
- Polygons in the coordinate plane
- Functions
- Graphing functions
- Functions in the real world

## **Chapter 8: Geometry and Measurement.**

- Areas of parallelograms and triangles
- Areas of polygons
- Three-dimensional figures
- Surface area of prisms and pyramids
- Volumes of rectangular prisms

## **Chapter 9: Data and Graphs.**

- Finding the mean
- median and mode
- Frequency tables and dot plots
- Box and whisker plots
- Histograms
- Variability of data
- Shape of distribution
- Statistical questions

The Common Core State Standards identify a limited number of topics at each grade level, allowing enough time for students to achieve fluency, if not mastery of these concepts. The subsequent year of study builds on the concepts of the previous year.

Students are expected to have achieved fluency with the following:

Times tables

Operations with Whole Numbers (+, -, ×, ÷)

Operations with Decimals (+, -, ×, ÷)

Operations with Fractions (+, -, ×)

I have attached some worksheets involving decimals and fractions. The students will be given a diagnostic test upon arrival in 6<sup>th</sup> grade to assess the above skills.

I will not be assessing operations with whole numbers since those skills are involved with operations with decimals. Students should have mastery of their times tables.

If a student needs more practice mastering the above skills, he/she should use the Khan Academy Program to improve those skills.

Mr. Hamel

Name: \_\_\_\_\_ Homework Decimals and adding fractions

①

Answer the following. Show your work.

(1)  $8.3 + 212.45 + 9$

(6)  $0.015 \times 0.16$

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(2)  $54 - 8.7$

(7)  $29.6 \div 8$

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(3)  $413.9 - 8$

(8)  $107.5 \div 0.25$

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(4)  $3.9 \times 0.54$

(9)  $4 \div 0.002$

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(5)  $2.8 \times 7$

(10)  $8\frac{1}{6} + 5\frac{1}{3}$

$$(11) 6 + 2\frac{5}{9}$$

$$(16) 8\frac{4}{5} + 5\frac{1}{3}$$

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$$(12) 4\frac{3}{4} + 3\frac{4}{5}$$

$$(17) 9\frac{1}{10} + \frac{6}{7}$$

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$$(13) 1\frac{5}{6} + 5\frac{3}{4}$$

$$(18) 3\frac{3}{8} + 4\frac{7}{9}$$

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$$(14) \frac{7}{9} + \frac{8}{12}$$

$$(19) 5\frac{3}{5} + 2\frac{7}{8}$$

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$$(15) 2\frac{3}{7} + 9\frac{2}{3}$$

$$(20) 9\frac{1}{2} + 10\frac{1}{2}$$

Name: \_\_\_\_\_ Homework Decimals and +, - fractions

9  
2

Answer the following. Show your work.

(1)  $54.39 + 8 + 2.7$

(6)  $0.045 \times 0.09$

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(2)  $34 - 0.34$

(7)  $6.46 \div 1.9$

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(3)  $72 - 9.306$

(8)  $6.3 \div 0.45$

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(4)  $4.23 \times 79$

(9)  $18 \div 0.005$

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(5)  $6.2 \times 0.58$

(10)  $8\frac{4}{7} + 2\frac{2}{3}$

$$(11) 5\frac{1}{2} + 3\frac{5}{8}$$

$$(16) 6\frac{3}{8} - 4$$

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$$(12) 9 + \frac{7}{8}$$

$$(17) 23\frac{2}{9} - 8\frac{5}{6}$$

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$$(13) 7\frac{3}{4} - 2\frac{1}{6}$$

$$(18) 7\frac{6}{11} - 2\frac{1}{3}$$

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$$(14) 12\frac{1}{7} - 8\frac{2}{3}$$

$$(19) 8\frac{4}{7} - 3\frac{8}{9}$$

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$$(15) 4 - \frac{3}{5}$$

$$(20) 5\frac{5}{9} - 1\frac{7}{8}$$

Answer the following. Show your work.

(1)  $9.4 + 312 + 24.16$

(6)  $1.38 \div 2.3$

(2)  $83.2 - 4.95$

(7)  $58.8 \div 0.14$

(3)  $7 - 0.7$

(8)  $3\frac{5}{8} + 2\frac{3}{4}$

(4)  $2.9 \times 3.4$

(9)  $7\frac{1}{9} + 2\frac{2}{3}$

(5)  $5.36 \times 8$

(10)  $8\frac{1}{5} - 2\frac{5}{6}$



$$(11) 14 - 7\frac{3}{7}$$

$$(16) \frac{15}{16} \times 1\frac{3}{5}$$

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$$(12) 8\frac{2}{5} \times \frac{15}{24}$$

$$(17) 1\frac{1}{6} \times \frac{5}{7}$$

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$$(13) 2\frac{2}{3} \times 2\frac{1}{4}$$

$$(18) 5\frac{2}{3} \times 1\frac{1}{2}$$

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$$(14) 3\frac{1}{5} \times \frac{3}{8}$$

$$(19) 4\frac{1}{2} \times 1\frac{2}{5}$$

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$$(15) 2\frac{2}{7} \times 1\frac{3}{4}$$

$$(20) 3\frac{1}{4} \times 2\frac{2}{3}$$