

Name: \_\_\_\_\_

# Math Study Guide

## Unit 5: Fractions, Decimals, Percents

WORD	DEFINITION
Fraction	A fraction includes a numerator and denominator; we can think of a fraction as equal parts of a whole
Mixed Number	A mixed number is a whole number with a fraction; for example... $3 \frac{5}{8}$ or $42 \frac{16}{21}$
Improper Fraction	A fraction where the numerator is greater than the denominator; a fraction where the number of equal parts is more than a whole
Whole Number	Just a single number; for example: 23, 58, 2, 899, 44, 13
Simplify (or reduce)	To make smaller; you can simplify a fraction by dividing the numerator and denominator by a common factor
Simplest Form	When a fraction can no longer be reduced; this happens when there is no common factor for the numerator and denominator
Numerator	The top part of a fraction
Denominator	The bottom part of a fraction
Convert	To change from one form to another; for example, converting from a fraction to decimal or converting from decimal to percent
Greatest Common Factor	The largest factor for a pair or set of numbers; for example, the GCF for 12, 18, and 24 = 6.
Lowest Common Multiple	The smallest multiple for a pair or set of numbers; for example, the LCM for 6, 12, and 3 = 12
Equivalent	Equal to or the same
Common Denominator	When fractions have the same number as their denominator; common denominators make it easy to compare fractions

# FRACTIONS, DECIMALS, & PERCENTS TO MEMORIZE!

## Halves

Fraction	Decimal	Percent
$\frac{1}{2}$	0.5	50%
$16\frac{1}{2}$	16.5	X

## Thirds

Fraction	Decimal	Percent
$\frac{1}{3}$	0.3333	About 33%
$\frac{2}{3}$	0.6666	About 67%

## Fourths

Fraction	Decimal	Percent
$\frac{1}{4}$	0.25	25%
$\frac{2}{4}$	0.5	50%
$\frac{3}{4}$	0.75	75%

## Fifths

Fraction	Decimal	Percent
$\frac{1}{5}$	0.2	20%
$\frac{2}{5}$	0.4	40%
$\frac{3}{5}$	0.6	60%
$\frac{4}{5}$	0.8	80%

## Hundredths (Convert to hundredths place value)

Fraction	Decimal	Percent
$\frac{1}{100}$	0.01	1%
$\frac{23}{100}$	0.23	23%
$\frac{93}{100}$	0.93	93%

## Tenths

$$\frac{1}{10} = 0.1 = 10\%$$

$$\frac{2}{10} = 0.2 = 20\%$$

$$\frac{3}{10} = 0.3 = 30\%$$

$$\frac{4}{10} = 0.4 = 40\%$$

$$\frac{5}{10} = 0.5 = 50\%$$

$$\frac{6}{10} = 0.6 = 60\%$$

$$\frac{7}{10} = 0.7 = 70\%$$

$$\frac{8}{10} = 0.8 = 80\%$$

$$\frac{9}{10} = 0.9 = 90\%$$

$$\frac{10}{10} = 1.0 = 100\%$$