

5th Grade Math Reference Sheet

PLACE VALUE

Millions		Thousands			Ones			Decimals			
H	T	O	H	T	O	Hundreds	Tens	Ones	tenths	hundredths	thousandths

Place Value: Where it lives...street **Name**, **Place** only

Value of a Number: How much is it worth? Think \$\$\$\$

What Operation do I use ???

Addition

Sum
Altogether
In all
More than
Increased by
Total
Perimeter

Subtraction

Difference
How much more
How much less
How much left
Decreased by
Amount of change

Multiplication

Product
Of
Percent of
Fraction of
Twice
of times
Each

Division

Quotient
Shared equally
Split evenly
Half $\div 2$
Size/cost of each
Per (unit)
Average

Number Forms

Standard Form — regular numbers — 1,234,567

Word Form — say it and write it out (See Place Value above for spelling)

Expanded Form — stretched - out 2 ways — with “+” and “x”

Estimation

1. Round to the highest place value (remember 0 1 2 3 4 digit remains the same and 5 6 7 8 9 the digit goes up)
2. Then do operation given (add, subtract, multiply)
3. OR with Division - use compatible numbers

Division Steps

Dividend \div Divisor = Quotient

The **dividend** is the first one **in the house** locking the **door on the divisor!**

D \div
M **x**
S -
C \checkmark
B \downarrow
Repeat



Order of Operations

(P)lease

Excuse

My Dear \Rightarrow fltr

Aunt Sally \Rightarrow fltr

Average

Mean ☹ “It’s A lot of work to Do!”

Mode

Median (don’t forget to order)

Range-Difference = high-low



	1	2	3
	B M		
x			
	n	n	n
+			
	n	n	☺

First the Maid cleans

Interrupts the Butler ☺

Then the Butler checks

A few are Prime but

Lots are Composite

Probability

P =

$\frac{\# \text{ of favorable outcomes}}{\# \text{ of possible outcomes}}$

Divisibility Rules

LOOK at numbers **2, 5, 10**

- Look at last digit

ADD numbers **3, 9**

- 3 add the digits, is the sum divisible by 3
- 9 add the digits, is the sum divisible by 9

Fractions: Adding and Subtracting

1. Find a common denominator
2. Make equivalent fractions
3. Add or subtract numerators only
4. SIMPLIFY

To Order or Compare Fractions

1. **Change** to mixed to improper
2. Make **equivalents** with common denominators
3. **Rewrite** original fractions

Simplify = Rename = Reduce =

Lowest terms = Simplest Form

~ \div top and bottom by the same number

~ Use Ladder method



Fractions

Dividing fractions is a pain
 Unless you know the rule
 Flip the second fraction round
 And multiply...that’s cool

