

Words and definitions – Book 1

addend (**ad**-end) – the numbers you are adding

addition (uh-**dish**-uhn) - the act of adding or putting things together and finding out how much you have when you put it together. (I used addition to find out how many CDs my friend and I had together.)

and (**and**)– and sometimes means addition

Example: 4 and 2 is 6 $4 + 2 = 6$

arithmetic (uh-**rith**-muh-tik) - using numbers in adding, subtracting, multiplying, and dividing. (I learned my multiplication tables in arithmetic class.)

base (**bayss**) - the bottom number when you have a number to a power. (Example: In 3^4 , the 3 is the base.)

common (**kom**-uhn) - something that two things share or both have the same. (Jill is our common friend. Bill and Jeff have a common kitchen where they both cook.)

common factor- when two or more numbers share the same factor.

common multiple- when two or more numbers both have the same multiple.

Example: multiples of 2 are : 2,4, 6, 8,10, 12, 14, 16, 18...
multiples of 4 are : 4 ,8, 12 ,16,...

The first 4 common multiples are 4, 8, 12, and 16.

composite (kuhm-**poz**-it) - made up of many parts from different sources. (The composite sketch of the criminal was drawn from information given by Bill, Sue and Jane.) (The composite stone was made of three different kinds of rock.)

composite number- a whole number with more than two different factors.

Examples: 10 (has factors 1, 2, 5 and 10)
9 (has factors, 1, 3, and 9)

consecutive (kuhn-**sek**-yuh-tiv) - following one after another without a break.

(When you recite the alphabet, you say it in consecutive order.) (I read three consecutive chapters yesterday.)

consecutive numbers- numbers that follow each other in order (3,4,5 are consecutive) (21, 22, 23, 24 are consecutive)

counting numbers (**kount**-ing) - the set of numbers used in counting. 1,2,3,4...

cubed (**kyoobd**) - instead of saying “to the third power” you can say “cubed”. (5³ means five to the third power, or five cubed.)

difference (**dif**-ruhns) – the answer to a subtraction problem. (The difference of 10 and 2 is 8.)

difference (**dif**-ruhns) – subtraction; or the answer when you subtract

Example: the difference of 8 and 5 is 3. $8 - 5 = 3$

digit (**dij**-it) - the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. (There are two digits in the number 53.)

divide (duh-**vide**) - to split up a number into groups of whatever you are dividing by

dividend (**div**-i-dend) - the number you are dividing

divisibility (di-**viz**-uh-**bil**-uh-tee) - the quality of being divisible Example: 10 has a divisibility of 2 and 5.

divisibility rules (di-**viz**-uh-**bil**-uh-tee **roolz**) - short cuts to quickly know what a number is divisible by.

divisible (di-**viz**-uh-buhl) - a whole number is divisible by another whole number if the remainder is zero when you divide. Example: 10 is divisible by 5 because when you divide you get 2 with no remainder.

$$\begin{array}{r} \underline{\text{X X X X X}} \\ 1 \end{array} \quad \begin{array}{r} \underline{\text{X X X X X}} \\ 2 \end{array} \quad \text{no remainder}$$

division (di-**vizh**-uhn) - the act of dividing. Example: 35 divided by 7 equals 5 (Take the number 35 and split it into groups of 7. There are 5 groups of 7 in the

number 35.)

divisor (**di-vye-zur**) - the number you are dividing by Example: $12 \div 4 = 3$
divisor is 4

equal (**ee-kwuhl**) - the same as. (She has an equal number of left shoes as right shoes.)

even numbers (**ee-vuhn**) - whole numbers that can be divided evenly by 2 with no remainder. 0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,...

exponent (**ek-spoh-nuhnt**) - a number written to the upper right side of another number, showing how many times that number should be multiplied. (Example: In 3^4 , the 4 is the exponent. 3^4 means $3 \times 3 \times 3 \times 3$.)

factor (**fak-tur**) - the numbers you are multiplying

factor (**fak-tur**) - factor has two definitions that mean the same thing but are different ways of looking at it.

- a. one of the numbers multiplied to get a product.

Example: 5 factor
 $\times 6$ factor
 30

- b. a whole number that can be divided exactly into a larger number.

Example: 5 can be divided exactly into 30
 6 can be divided exactly into 30
 Therefore 5 and 6 are factors of 30.

factoring (**fak-tur-ing**) – The action of separating a number into its factors. You are actually dividing. This word is a verb, so it could be in different forms: will factor, factored, factoring, etc.

Examples: I factored 10 into 2 times 5.
 I will factor 20 into $2 * 10$.
 I was factoring the number 40 into $2 * 2 * 10$.

factorization (**fak-tur-uh-zay-shuhn**) - the result of factoring a number. (The factorization of 10 gives 2×5 .)

factor tree- a factor tree is a helpful way to find the prime factorization of large numbers.

figure (**fig**-yur) - a symbol used in counting or measuring. Examples: 4, 32, 74.1, 9, 0 (312 is a figure.)

GCF –greatest common factor

greater than (**grayt**-ur **THan**) - bigger or larger than. (8 is greater than 7.) (My left foot is greater than my right foot.)

greatest (**grayt**-ist) - largest, biggest (Sally has 20 CDs and Mike has 30, so Mike has the greatest collection.)(Of the numbers 3,4,and 7, the greatest is 7.)

greatest common factor- the largest shared factor two or more numbers has.

hundreds place (**huhn**-druhdz)- Two places over towards the left, in a whole number. It means a digit in this place is worth one hundred times the digit. (In the number 254, the 2 is in the hundreds place and it has a value of 100×2 or 200.)

integers (**in**-tuh-jur) - numbers made from the counting numbers (including 0) by putting a positive or a negative sign in front (the positive sign is often left out) ...-4, -3, -2, -1, 0, 1, 2, 3, 4, 5...

is – equals, or is equal to

Example: 1 plus 4 is 5 $1 + 4 = 5$

LCM- least common multiple

least (leest) - the smallest (He has the least books of all the students.)(Of the numbers 10 and 20, 10 is the least.)

Least common multiple- the smallest of the common multiples.

In the example above, the least of the common multiples is 4.

less than (**less** **THan**) - smaller than. (7 is less than 8.) (This paycheck is less than the one I got last week.)

letter (let-ur) - a symbol that stands for a sound of speech; part of an alphabet

listing all possible factors – Sometimes you are asked to list all the possible factors of a number. This means you should list all the numbers that can exactly divide into the number.

Example: List all possible factors of 20. They are 1,2,4,5,10, and 20.

listing multiples of a number- to list multiples of a number, multiply the number by 1 then 2 then 3 etc.

example: multiples of 3 are : $3 \times 1 = 3$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$3 \times 6 = 18$$

etc.

list the multiples of 3: 3, 6, 9, 12, 15, 18, etc.

mark (mark) - a written symbol, like a question mark or other punctuation marks like a comma or period.

minuend (min-yoo-end) – the number you are subtracting from

multiple (muhl-tuh-puhl)- a multiple has two definitions that are the same, but two different ways of looking at it.

- a. a number that can be divided by another number, two or more times, exactly. Example: 12 can be divided exactly by 3 so 12 is a multiple of 3.
- b. In a multiplications problem you can say the answer is a multiple of both the factors.
Example: if 3 times 4 is 12, then 12 is a multiple of 3 and a multiple of 4.

3	factor	
× 4	factor	
12		
	so 12 is a multiple of both 3 and 4	

multiplication (**muhl-tuh-pli-kay-shun**) - the act of multiplying, a quicker way to add.

multiply (**muhl-tuh-plye**) - to take a number and add it a certain amount of times.

Example: $2 \times 3 = 2 + 2 + 2$

natural numbers (**nach-ur-uhl**) - counting numbers

number (**nuhm-bur**) – a symbol or word that is used in counting or measuring. Examples: 3, 76, 1.42, 6.5, six, twenty. (Ten is a number.)

numbers (**nuhm-bur**) – symbols used to measure or name quantities. Examples: 2 people, 4 inches, 7, 8.3, 100 feet, 55.66, 3, 12, -23, -17, -34.56

number sentence- an equation made up of numbers and symbols. Examples:

$$2 + 3 = 5 \quad 2 - 4 = 2 \quad 3 = 4 - 1 \quad 4 + 3 = 7$$

numeral (**noo-mur-uhl**) – the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. Same as a digit. (There are two numerals in the number 61.)

odd numbers (**od**) - whole numbers which, when divided by two, have a remainder of one. 1,3,5,7,9,11,13,15,17,19,21,23,25,27...

ones digit- the digit that is in the ones place. Example: in the number 234 the ones digit is a 4.

ones place (**wuhnz**) - The farthest place to the right, in a whole number. It means a digit in this place is worth one times the digit. (In the number 254, the 4 is in the ones place and it has a value of 1×4 or 4.)

period (**pihr-ee-uhd**) - 1. A mark at the end of a sentence, showing the

sentence has ended.

2. a length of time (He walked around outside for a short period.)
3. in math, a group of three places of digits. Periods are usually separated by commas. Some periods are shown as follows. The name of the period comes from the right most place value in that period. (The number contained three periods.)

9 4 2	,	3 1 7	,	4 2 8
millions		thousands		ones
period		period		period

place (**playss**) - a particular area or location (We lived in several places when we were children.)

place value (**playss val-yoo**) - The value of a position of a digit in a number. (The place value of the 5 in 52, is 10)

power (**pou-ur**) - another word for an exponent. The power is how many times you multiply the number. (Example: 3^4 means 3 to the fourth power. 3^4 means $3 \times 3 \times 3 \times 3$.)

prime (**prime**) - of highest importance or quality. (We ate prime beef. That is a prime house.)

prime factorization- when you factor a number, and show it written in prime numbers with multiplication signs between each number. (Example: the prime factorization of 18 would be $3 \times 2 \times 2$)

prime number- any number whose factors are 1 and itself only (one is not a prime number.) Examples: 2, 3, 5, 7, 11, 13, 17,...

product (**prod-uhkt**) – the answer to a multiplication problem

product (**prod-uhkt**) – multiplication; or the answer when you multiply
Example: the product of 10 and 3 is 30. $10 \times 3 = 30$

quotient (**kwoh-shuhnt**) - the answer to a division problem

quotient –(**kwoh**-shuhnt) division; or the answer when you divide

Example: the quotient of 8 and 4 is 2. $8 \div 4 = 2$

remainder (ri-**mayn**-dur) - a remainder is a part left over after you divide.

Example: divide 7 by 3 and you get 2 with a part left over.

<u>x x x</u>	<u>x x x</u>	x
1	2	remainder

sign (**sine**) - a symbol that stands for something, like a dollar sign, or a plus sign.

squared (**skwaird**) - instead of saying “to the second power” you can say “squared”. (6^2 means 6 to the second power, or 6 squared.)

subtraction (suhb-**trak**-shun) - the act of taking something away from something else. (I used subtraction to find out how many mice I had after 2 ran away.)

subtrahend (**suhb**-truh-hend) – the number you are subtracting

sum (**suhm**) – addition; or the answer when you add

Example: the sum of 1 and 3 is 4. $1 + 3 = 4$

sum (**suhm**) - the answer to an addition problem. (The sum of 3 and 4 is 7.)

symbol (**sim**-buhl) - something that stands for or represents something else. Symbols can be letters, words, marks, or pictures.

tens place (**tenz**) - One place over towards the left, in a whole number. It means a digit in this place is worth ten times the digit. (In the number 254, the 5 is in the tens place and it has a value of 10×5 or 50.)

times (**timez**)– multiplication

Example: 3 times 4 is 12 $3 \times 4 = 12$

twice (**twisse**)- two times, or times 2.

Example: twice 3 is 6 means $2 \times 3 = 6$

unit (**yoo-nit**) – the number one. (The smallest counting number is a unit.)(I added two units together to get 2.)(I wrote two units next to each other to make the number eleven.)

units place (**yoo-nitz**) – the ones place

value (**val-yoo**) - 1. What something is worth. (What is the value of this radio?)

2. In math, a given or calculated number or quantity. (The value of y is given as 3.)(Find the value of x if $x = 2 + 3$)

whole numbers (**hole**) - the set of counting numbers and zero. 0, 1, 2, 3, 4, 5, 6...

word (**wurd**) - a letter or group of letters that stand for spoken sounds or a group of sounds and has meaning and is used as a single piece of speech