

Iron County Schools

5th Grade Math Dictionary

acute angle: any angle that is less than 90° .

Example:



acute triangle: a triangle where all the angles are less than 90°

Example:



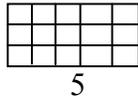
angle: an angle is made where two straight lines cross or meet each other at a point.

Example:



area: how many squares it takes to cover a shape.

Example: $3 \times 5 = 15$ This box has an **area** of 15 squares.



associative property: see **properties** page at back.

average: same as **mean**. Add up all the numbers and divide by how many numbers you have.

Example: $3 + 4 + 5 = 12$ You added 3 numbers together, so you will now divide by 3.
 $12 \div 3 = 4$ The **average** is 4.

common denominator: when two fractions have the same number on the bottom.

Example: $\frac{3}{8}$ and $\frac{7}{8}$ Same!

common factor: when two numbers can both be evenly divided by the same number.

Example: 10 & 15 can both be evenly divided by 5. 5 is a **common factor** of 10 & 15.

common multiple:

Example: If you count by 2's it goes like this: 2 4 6 8 10 12 14
 If you count by 3's it goes like this: 3 6 9 12 15 18 21

Any number that is the same in both lines is a **common multiple** for those numbers.

6 and 12 are **common multiples** for the numbers 2 and 3.

2 4 6 8 10 12 14
 3 6 9 12 15 18 21

commutative property: see **properties** page at back.

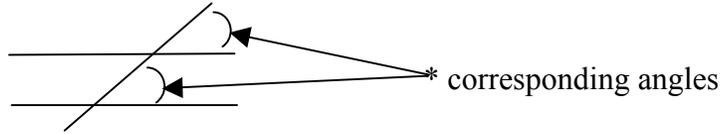
composite: a number that can be divided evenly by more numbers than just 1 and itself.

Example: the first 10 **composite** numbers are 4 6 8 9 10 12 14 16 & 18.

Example: The number 12 can be divided evenly by 1, 2, 3, 4, 6 *and* 12.

corresponding angles:

Example:



data: a collection of organized numbers.

decimals: For how we use this word in class, **decimals** are the numbers that come after a decimal point.

Examples: 0.235 8.067 10.23456

denominator: The bottom number of a fraction.

Example: $\frac{3}{4}$ ←*

distributive property: see **properties** page at back.

dividend: the number that's being divided in a division problem.

Example: $3 \overline{) 6}^2$ ←*

divisibility: see **divisible**

divisible: when we use this word we usually mean a number can be divided by another number with no remainder.

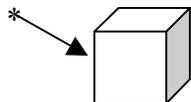
Example: 12 is **divisible** by 1, 2, 3, 4, 6, and 12. It is NOT **divisible** by 7.

divisor: the number that does the dividing in a division problem.

Example: * → $3 \overline{) 6}^2$

edge: the line that makes the outside of a shape.

Example:



equation:

Example: $2 + 4 = 6$

equilateral triangle: A triangle where all the sides are the same length.

Example: 

equivalent fractions: fractions that are worth the same value.

Example: $\frac{1}{2} = \frac{2}{4}$ $\frac{1}{3} = \frac{3}{9}$

exponent: is the little number that says how many times the number below it should be multiplied by itself.

Example: 3^3 means $3 \times 3 \times 3$ which is 27 (**NOT** 9!)

expression: part of an equation. It does not contain an equal sign.

Examples: $2 + 3$ $x + y$ $4(x - y)$

face: the part of an object that is surrounded by **edges**.

Example: * 

factor: the numbers you're multiplying in a multiplication problem.

Example: $\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$ * 6 and 3 are **factors** of 18.

fractions: numbers that tell you how something should be divided up.

Examples: $\frac{3}{4}$ $\frac{7}{8}$ $\frac{9}{10}$ $\frac{12}{4}$

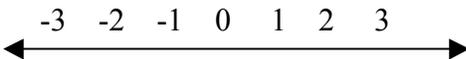
improper fraction: a fraction where the top number is bigger than the bottom number.

Examples: $\frac{7}{5}$ $\frac{5}{2}$ $\frac{9}{8}$

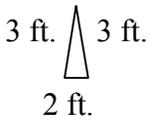
inequality: where two numbers do not equal each other. It is shown by this sign: \neq

Example: $7 \neq 5$ (7 does not equal 5)

integer: all the regular counting numbers as well as zero and the negative numbers.

Examples: 

isosceles triangle: a triangle where two sides are the same length and one side isn't.

Example: 

maximum values: the largest number in a group.

Example: in this group of numbers: 3 6 7 10 15

 the **maximum value** is 15, because it's the biggest.

mean: is the same thing as **average**. Add up all the numbers and divide by how many numbers you have.

Example: $3 + 4 + 5 = 12$ You added three numbers together, so you will now divide by 3.
 $12 \div 3 = 4$ The **mean** is 4.

median: is the middle number. Put the numbers in order from smallest to biggest. The number in the middle is the **median**. Median sounds like medium. Medium is in the middle. So is **median!**

Example: 3 4 6 (8) 12 12 14 8 is the **median** number because it's in the middle.

Note: If you have **two** numbers in the middle, add them together and divide by two. THAT is your **median**.

Example: 3 4 (5 6) 9 12 There are two numbers in the middle (5 & 6). $5 + 6 = 11$
 $11 \div 2 = 5.5$ The **median** for this set of numbers is 5.5 or $5 \frac{1}{2}$.

minimum values: the smallest number in a group.

Example: in this group of numbers: 3 6 7 10 15

 The **minimum value** is 3, because it's the smallest.

mixed numeral: a number and a fraction together.

Example: $5 \frac{1}{2}$

mode: this is the number that shows up most often in a group of numbers. **MOde = MOst** get it?

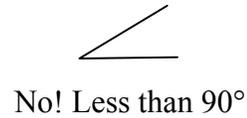
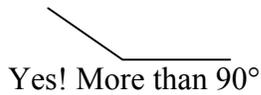
Example: 2 2 3 5 6 6 6 7 8 8 6 shows up the most. It is the **mode**.

numerator: the top number in a fraction.

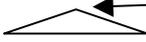
Example: $\frac{5}{8}$ 

obtuse angle: an angle that is more than 90°

Example:



obtuse triangle: a triangle that has one angle greater than 90°

Example:  * greater than 90°

order of operations: solve your equations in this order:

Parentheses
Exponents
Multiplication
Division
Addition
Subtraction

That makes the initials **PEMDAS**. A way to remember that is:
Please **E**xcuse **M**y **D**ear **A**unt **S**ally

parallel lines: two straight lines that go side by side and never touch. The two "L's" in parallel are parallel!

Example:  *these lines are **parallel** and these lines are **parallel** *

parentheses: when you see these in an equation, do what's inside them first.

Example: $(2 + 3) \times 10 \div 2 = 25$

without the parentheses, this is what the answer to the same problem would be:

$2 + 3 \times 10 \div 2 = 17$ (see **order of operations**.)

percent: how many out of 100

Example: 25 out of 100 means 25%.

The formula to figure out what percent you got on a test is this:

correct divided by # possible \times 100.

Example: Here's how you calculate your percent where you got 36 correct on a test worth 40 points: (use a calculator!) $36 \div 40 \times 100 = 90\%$

perpendicular lines: two lines that meet or cross and make a 90° angle.

Example:



Yes! 90° --**perpendicular**.



No! not 90° --**NOT perpendicular**.

polygon: a flat shape that has 3 or more straight sides and is closed.

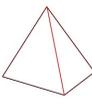
Example:  Yes!  No! Not closed.  No! Not straight.

prime: a prime number is only evenly divisible by 1 and itself.

Example: The first 10 prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, 23, and 29.

the only 2 numbers you can divide 5 by are 1 and 5. Nothing else will go in evenly. It is **prime**.

pyramid: has a polygon for its base and triangles for the rest of its faces that all meet at one point

Example: 

quotient: the answer to a division problem.

Example: $2 \overline{)6}$ 3 ←*

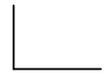
range: if you have a group of numbers, subtract your lowest number from your highest number. That is your **range**.

Example: 10 8 7 6 4 2
 $10 - 2 = 8$. Your **range** is 8.

ray: a straight line that starts at one point and goes forever.

Example: 

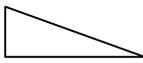
right angle: a 90° angle.

Example:  No! More than 90°  Yes! 90°  No! Less than 90°

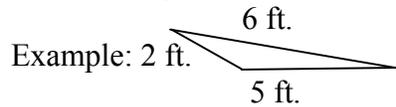
right prism: all faces are rectangles.

Example: 

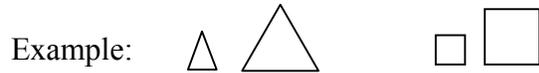
right triangle: contains one **right** (90°) angle.

Example:  90° *

scalene triangle: Has no sides that are the same length.



similar: two objects have the same shape but are different sizes.



simplest terms: a fraction is in simplest terms when the greatest **common factor** for the top and bottom number is 1.

Example: $\frac{2}{4}$ is not in **simplest terms**. $\frac{1}{2}$ is, because it has been reduced by dividing the top and bottom by 2.

straight angle: an angle that measures 180° . It makes a straight line.

Example: _____

surface area: how many squares can fit on the outside of an object.

triangle: three straight sides that are closed (touching).



variable: when you use a letter to stand for a number.

$r + 5 = 7$ when $r = 2$. It equals 9 when $r = 4$.

various symbols for multiplication & division: there are several different symbols we use to show multiplication and division. Make sure you know them all!

Examples:

Multiplication. An x:	$3 \times 3 = 9$	Division. a division sign	$\div 6 \div 3 = 2$
or a star *	$3 * 3 = 9$	or a slash	$/ 6 / 3 = 2$
or a dot •	$3 \cdot 3 = 9$	or a bar	$\frac{6}{3} = 2$
or ()	$3(3) = 9$		

vertex: the point where two lines in an angle meet.

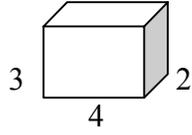


vertices: (**ver' tuh seez**) plural for **vertex**. (more than one vertex)

Example: Joe drew one vertex. Jill drew two vertices.

volume: How many cubes an object will hold.

Example: This box is 3 high, 4 wide, and 2 deep. $3 \times 4 \times 2 = 24$ cubes.



Properties:

associative property: says that when you add or multiply numbers it doesn't matter how you group them.

Example: in addition: $(3 + 5) + 2 = 3 + (5 + 2)$

In multiplication $(3 \times 5) \times 2 = 3 \times (5 \times 2)$

commutative property: says that when you add or multiply numbers it doesn't matter in which order you do them.

****That is not true when you subtract or divide!****

Remember, when you **communicate** with your friend, you both talk back and forth. You talk, your friend talks. Your friend talks, you talk. It works either way!

Example: In addition: $2 + 6 = 6 + 2$

In multiplication: $2 \times 6 = 6 \times 2$

distributive property: says that you multiply each number *inside* the parentheses by the number that's *outside* the parentheses.

Example: $2(1 + 7)$ is the same as $2 \times 1 + 2 \times 7$ which equals 16.

$3(4 + 5)$ is the same as $3 \times 4 + 3 \times 5$ which equals 27.

identity property: for addition: $6 + 0 = 6$ (when you **add** something to 0 it stays the same!)
for multiplication: $6 \times 1 = 6$ (when you **multiply** something by 1 it stays the same!)

zero property: The **zero property** of multiplication says that when you multiply *any number* by 0, the answer is **always** 0!

Example:

$$0 \times 0 = 0$$

$$3 \times 0 = 0$$

$$5 \times 0 = 0$$

$$1,256 \times 0 = 0$$

$$876,321,568,154,298,356,147,369,254,756,154,986,147,455,026,858 \times 0 = 0 !$$