Vocabulary Cards and Word Walls

Revised: June 2, 2011

Important Notes for Teachers:

- The vocabulary cards in this file match the Common Core, the math curriculum adopted by the Utah State Board of Education, August 2010.
- The cards are arranged alphabetically.
- Each card has three sections.
    - Section 1 is only the word. This is to be used as a visual aid in spelling and pronunciation. It is also used when students are writing their own "kid-friendly" definition and drawing their own graphic.
    - Section 2 has the word and a graphic. This graphic is available to be used as a model by the teacher.
    - Section 3 has the word, a graphic, and a definition. This is to be used for the Word Wall in the classroom. For more information on using a Word Wall for Daily Review – see "Vocabulary – Word Wall Ideas" on this website.
- These cards are designed to help all students with math content vocabulary, including ELL, Gifted and Talented, Special Education, and Regular Education students.

For possible additions or corrections to the vocabulary cards, please contact the Granite School District Math Department at 385-646-4239.

Bibliography of Definition Sources:

Algebra to Go, Great Source, 2000. ISBN 0-669-46151-8
Math on Call, Great Source, 2004. ISBN-13: 978-0-669-50819-2
Math at Hand, Great Source, 1999. ISBN 0-669-46922
Math to Know, Great Source, 2000. ISBN 0-669-47153-4
Illustrated Dictionary of Math, Usborne Publishing Ltd., 2003. ISBN 0-7945-0662-3
Math Dictionary, Eula Ewing Monroe, Boyds Mills Press, 2006. ISBN-13: 978-1-59078-413-6
Student Reference Books, Everyday Mathematics, 2007.
Houghton-Mifflin eGlossary, http://www.eduplace.com
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addend

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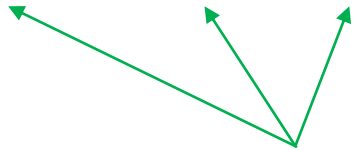
addend

33 + 4.7 + 0.9 = 38.6



addends

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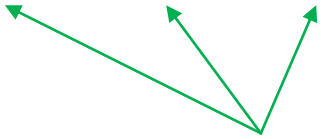
addend

33 + 4.7 + 0.9 = 38.6



addends

Any number being added.

algorithm

Partial Product Example

algorithm

555		
x 7		
35	Step 1:	Multiply the ones.
350	Step 2:	Multiply the tens.
3500	Step 3:	Multiply the hundreds.
3885	Step 4:	Add the partial products.

Partial Product Example

algorithm

555		
x 7		
35	Step 1:	Multiply the ones.
350	Step 2:	Multiply the tens.
3500	Step 3:	Multiply the hundreds.
3885	Step 4:	Add the partial products.

Step-by-step method for computing.

area

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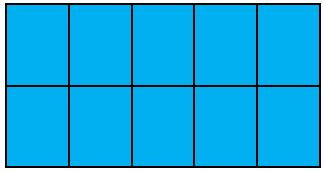
area

2 rows of 5 = 10 square units
or
2 x 5 = 10 square units



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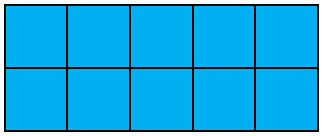
area

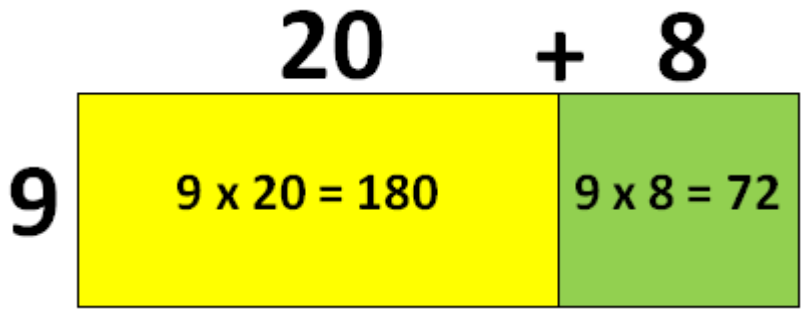
2 rows of 5 = 10 square units
or
2 x 5 = 10 square units



The measure, in square units, of the interior region of a 2-dimensional figure or the surface of a 3-dimensional figure.

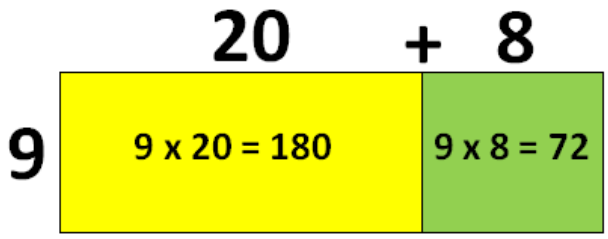
area model

area model



9 x 28 = (9 x 20) + (9 x 8) = 252

area model



A model of multiplication that shows each place value product

9 x 28 = (9 x 20) + (9 x 8) = 252

array

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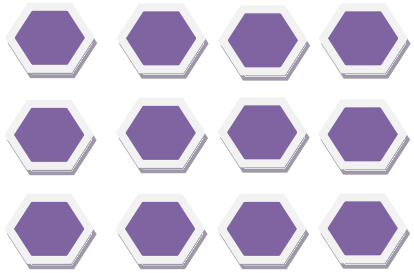
array

3 rows of 4
or
3 x 4



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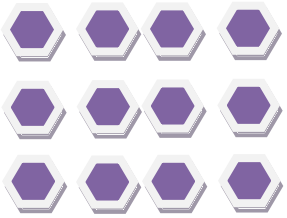
array

3 rows of 4
or
3 x 4



An arrangement of objects in equal rows.

Associative Property of Addition

Associative Property of Addition

$$(5 + 7) + 3 = 5 + (7 + 3)$$
$$12 + 3 = 5 + 10$$
$$15 = 15$$

Associative Property of Addition

$$(5 + 7) + 3 = 5 + (7 + 3)$$
$$12 + 3 = 5 + 10$$
$$15 = 15$$

The sum stays the same when the grouping of addends is changed.
$(a + b) + c = a + (b + c)$, where a, b, and c stand for any real numbers.

Associative Property of Multiplication

Associative Property of Multiplication

(5 x 7) x 3 = 5 x (7 x 3)

35 x 3 = 5 x 21

105 = 105

Associative Property of Multiplication

(5 x 7) x 3 = 5 x (7 x 3)

35 x 3 = 5 x 21

105 = 105

The product stays the same when the grouping of factors is changed. (*a* x *b*) x *c* = *a* x (*b* x *c*), where *a*, b, and c stand for any real numbers.

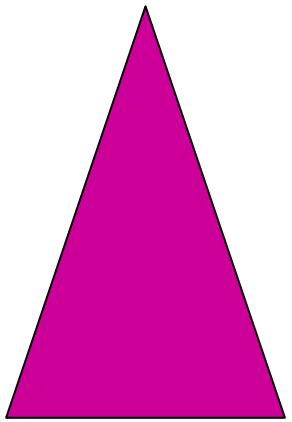
attribute

attribute

large

triangle

pink

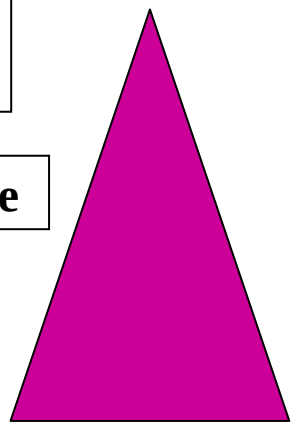


attribute

large

triangle

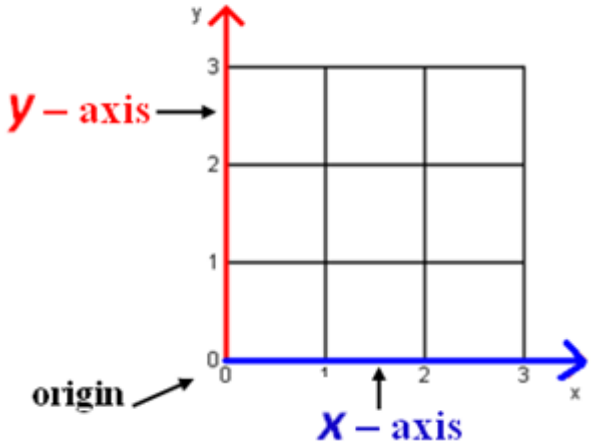
pink



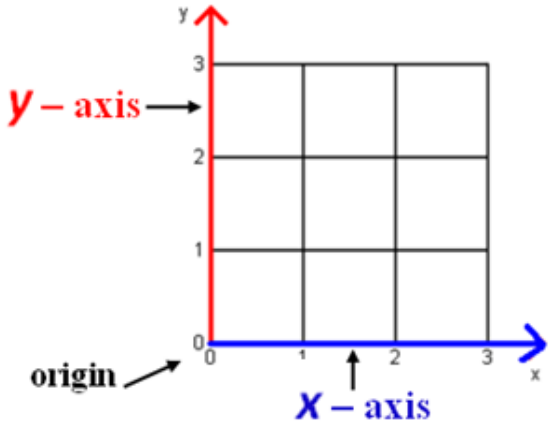
A characteristic.
e.g. size, shape or color

axis

axis



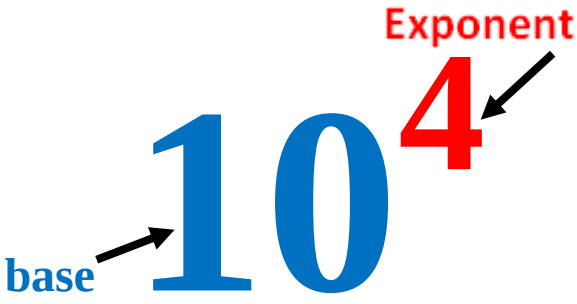
axis



A reference line from which distances or angles are measured in a coordinate grid.
(plural – axes)

base of an exponent

base of an exponent

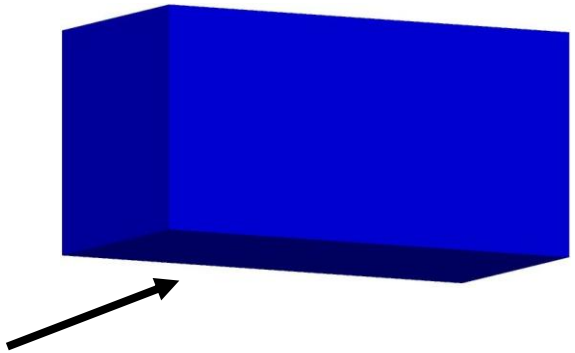


base of an exponent

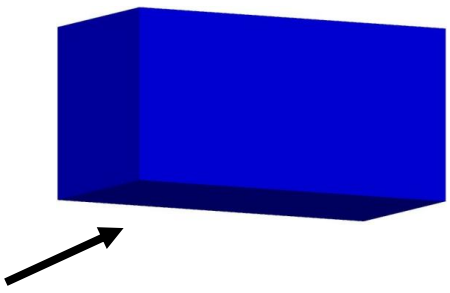
The number that is raised to a power. In 10^4 , 10 is the base and 4 is the exponent. 10 is raised to the power of 4. (10^4 = 10 x 10 x 10 x 10 = 10,000)

base of a solid figure

base of a solid figure



base of a solid figure



A base of a solid figure is usually thought of as a face upon which it can "sit." Most solid figures have more than one base.

benchmark fractions

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benchmark fractions

$\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{4}$

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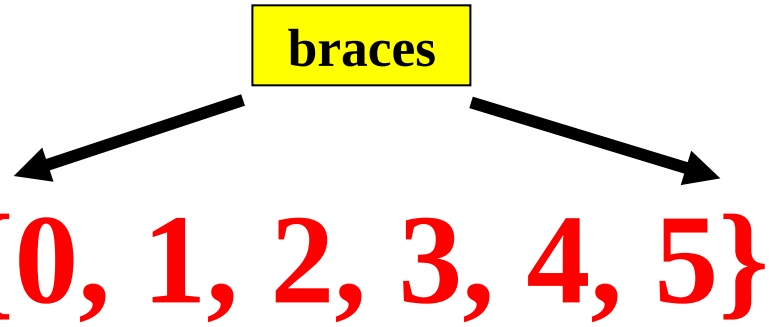
benchmark fractions

$\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{4}$

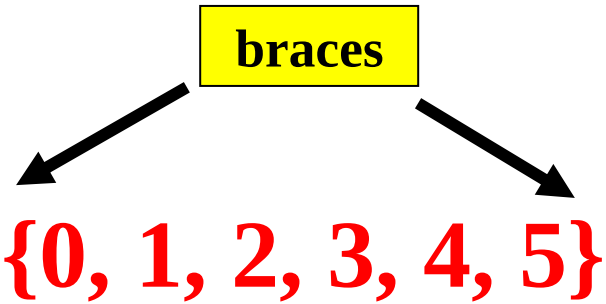
Fractions that are commonly used for estimation.

braces

braces



braces



Braces can be used to indicate that the objects written between them belong to a set.

brackets

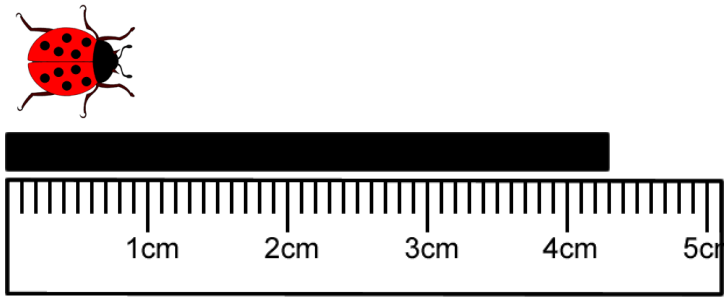
brackets **[(2 x 20) + 6]**

brackets **[(2 x 20) + 6]**

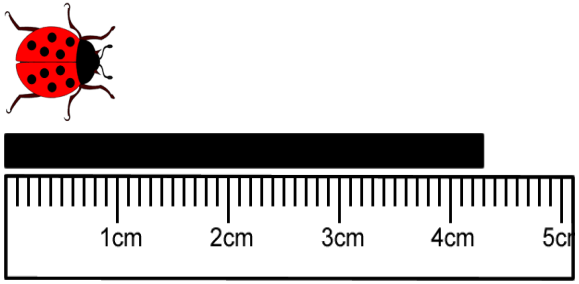
A type of grouping symbol used in pairs that tells what operation to complete first.

centimeter (cm)

centimeter (cm)



centimeter (cm)



A metric unit of length equal to 0.01 of a meter.

Commutative Property of Addition

Commutative Property of Addition

$5 + 3 = 3 + 5$

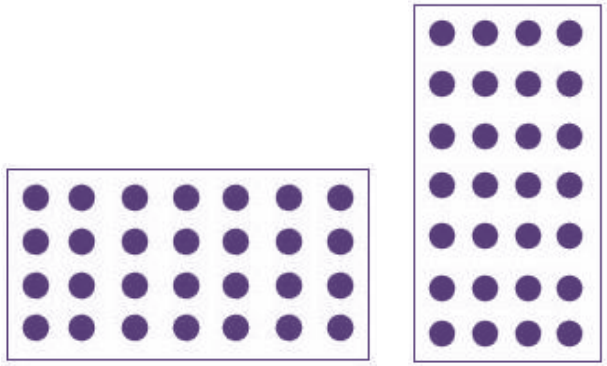
Commutative Property of Addition

$5 + 3 = 3 + 5$

The sum stays the same when the order of the addends is changed.
$a + b = b + a$, where a and b are any real numbers.

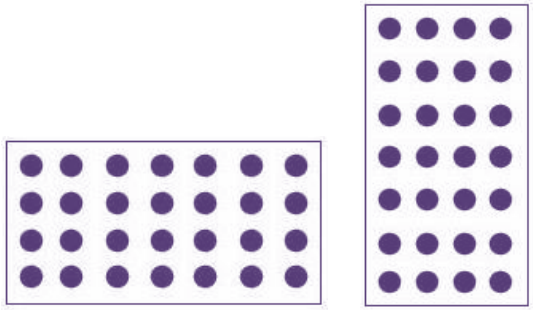
Commutative Property of Multiplication

Commutative Property of Multiplication



4 x 7 = 7 x 4

Commutative Property of Multiplication



4 x 7 = 7 x 4

The product stays the same when the order of the factors is changed. $a \times b = b \times a$, where a and b are any real numbers.

compose

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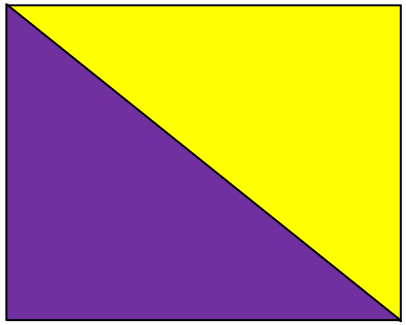
compose



2 triangles can form a rectangle

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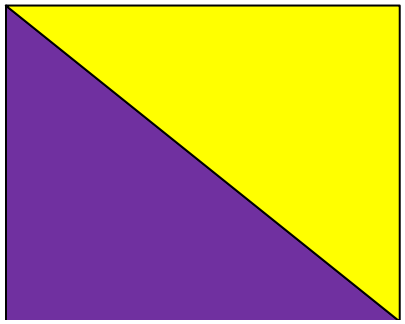
compose

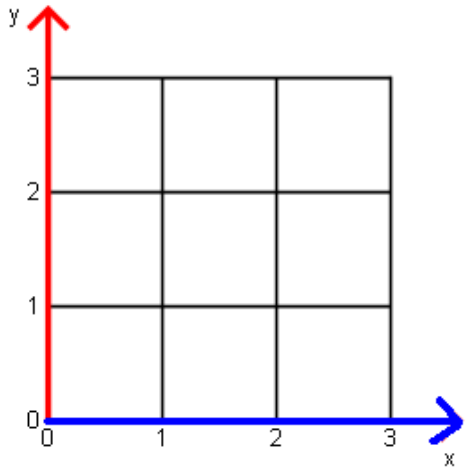


2 triangles can form a rectangle

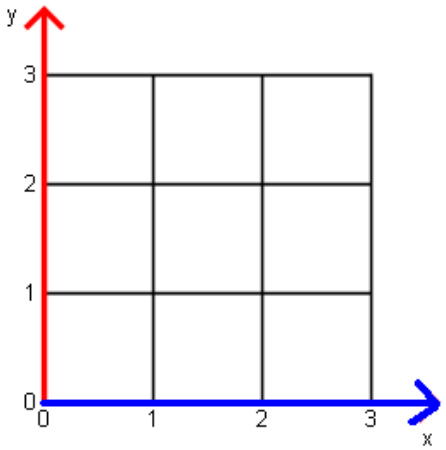
To put together, as in numbers or shapes.

coordinate plane

coordinate plane



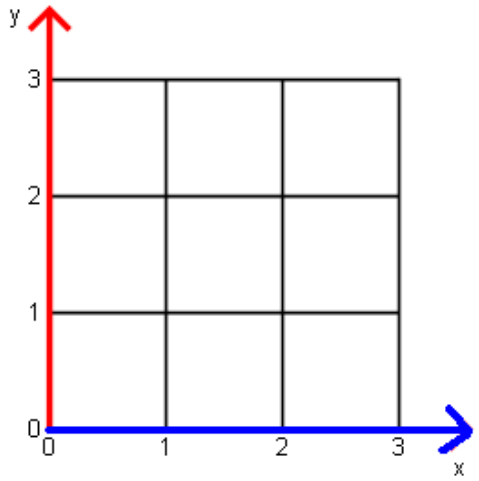
coordinate plane



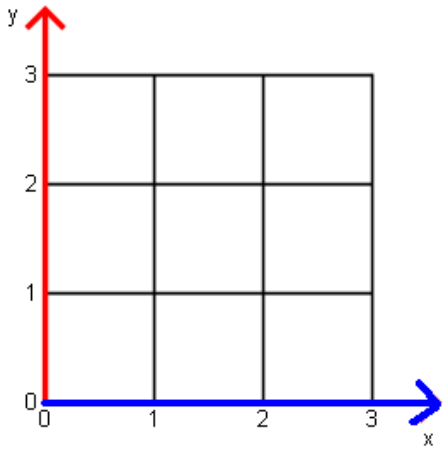
A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called coordinate *grid* or coordinate *system*.)

coordinate system

coordinate system



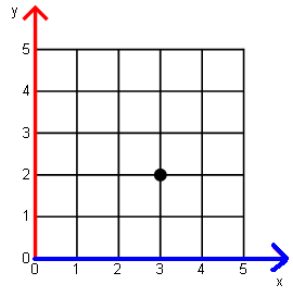
coordinate system



Also known as a coordinate grid. A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes.

coordinates

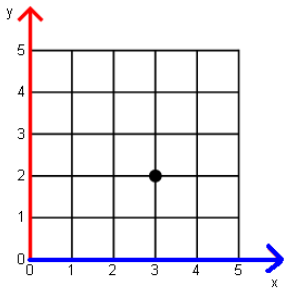
coordinates



(3, 2)

(*x* , *y*)

coordinates



(3, 2)

(*x* , *y*)

An ordered pair of numbers that identify a point on a coordinate plane.

corresponding terms

corresponding terms

	1st Term	2nd Term	3rd Term	4th Term
Add 3	3	6	9	12
Add 6	6	12	18	24

corresponding terms

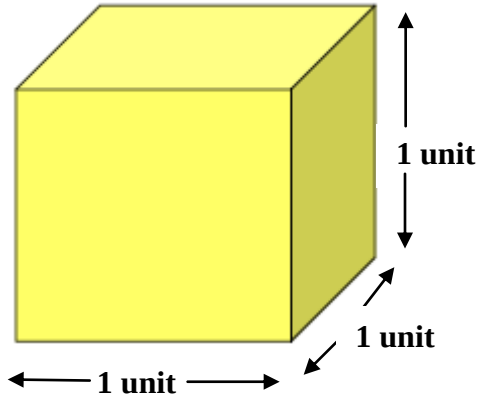
	1st Term	2nd Term	3rd Term	4th Term
Add 3	3	6	9	12
Add 6	6	12	18	24

Terms that are in the same position in a sequence of numbers.

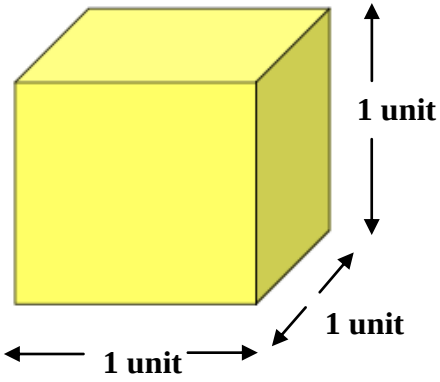
In the pattern shown, 9 and 18 are the 3rd terms in each sequence—they are corresponding terms.

cubic unit

cubic unit



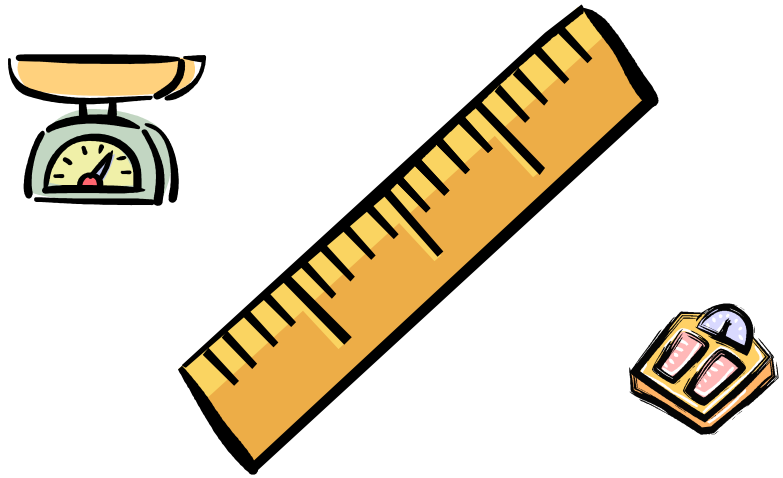
cubic unit



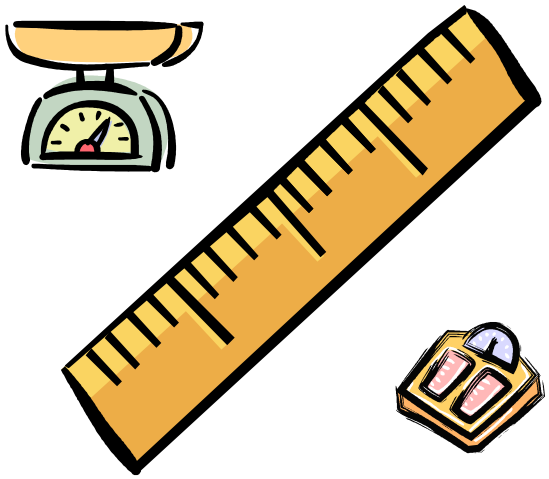
A unit such as a cubic meter to measure volume or capacity.

customary system

customary system



customary system



A system of measurement used in the U.S. The system includes units for measuring length, capacity, and weight.

data

data

Number of School Carnival Tickets Sold	
Kindergarten	22
1st Grade	15
2nd Grade	34
3rd Grade	9
4th Grade	16
5th Grade	29
6th Grade	11

data

Number of School Carnival Tickets Sold	
Kindergarten	22
1st Grade	15
2nd Grade	34
3rd Grade	9
4th Grade	16
5th Grade	29
6th Grade	11

Information, especially numerical information. Usually organized for analysis.

decimal

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decimal

$29.45 53.0

0.02

---

decimal

$29.45

53.0 0.02

A number with one or more digits to the right of a decimal point. *Decimal* is used as another name for decimal fraction.

decimal point

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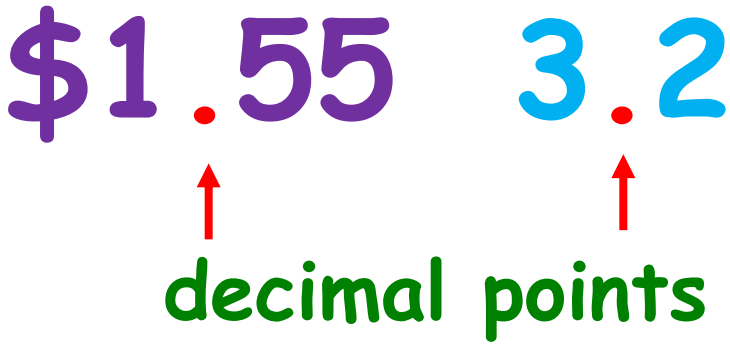
decimal point



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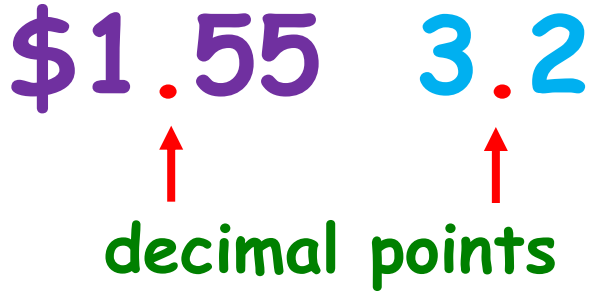
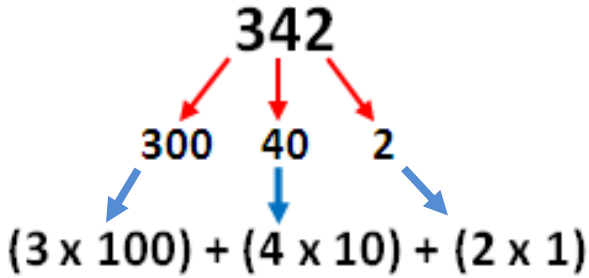
decimal point



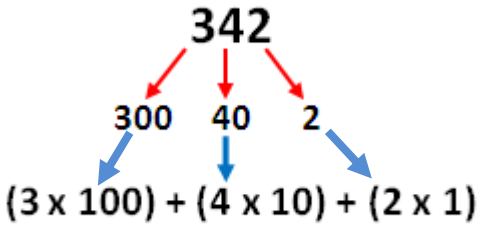
A dot separating the whole number from the fraction in decimal notation.

decompose

decompose



decompose



To separate into components or basic elements.

denominator

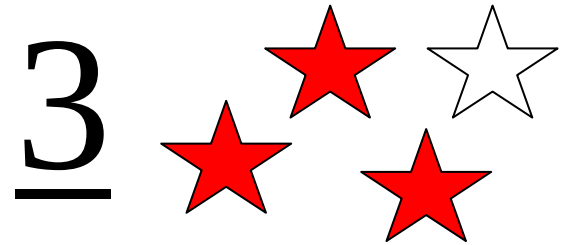
denominator

$\frac{3}{4}$

denominator

denominator

$\frac{3}{4}$



denominator

The quantity below the line in a fraction. It tells the number of equal parts into which a whole is divided.

difference

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difference

49.75 – 13.9 = 35.85

difference

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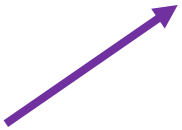
difference

49.75 – 13.9 = 35.85

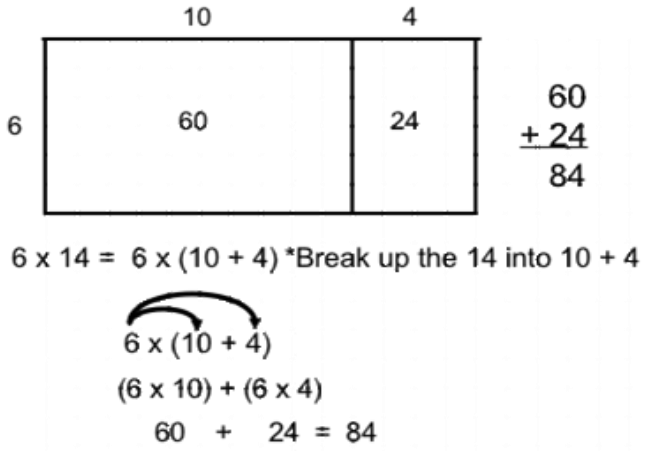


difference

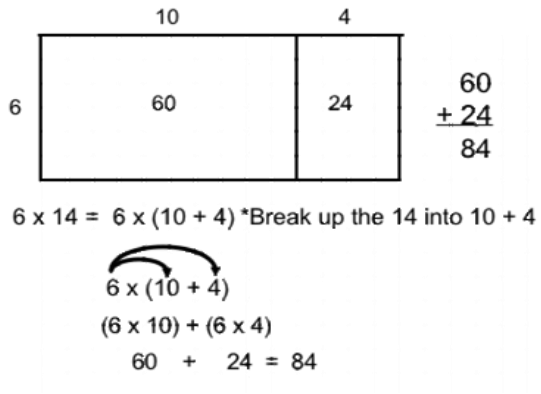
The amount that remains after one quantity is subtracted from another.

Distributive Property

Distributive Property



Distributive Property



When one of the factors of a product is a sum, multiplying each addend before adding does not change the product.

dividend

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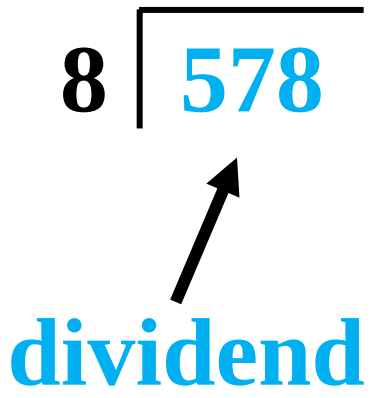
dividend



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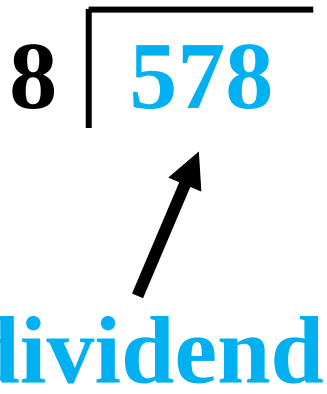
dividend

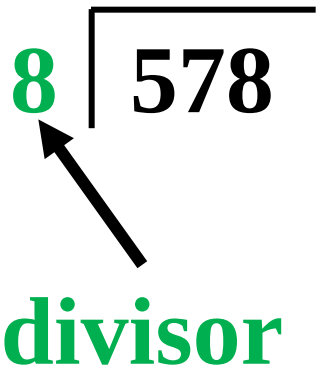


A quantity to be divided.

divisor

---

divisor



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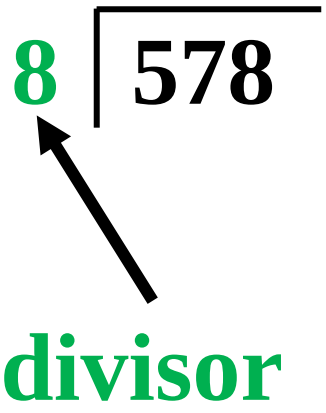
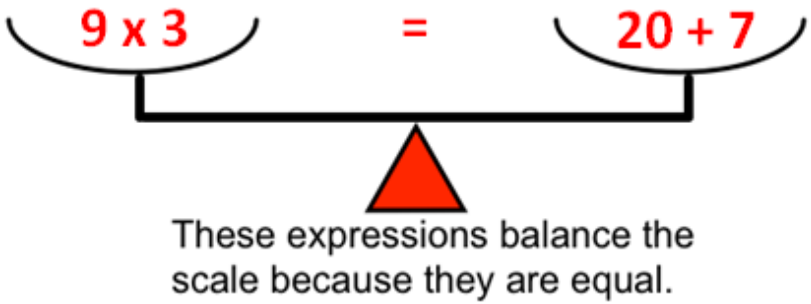
divisor



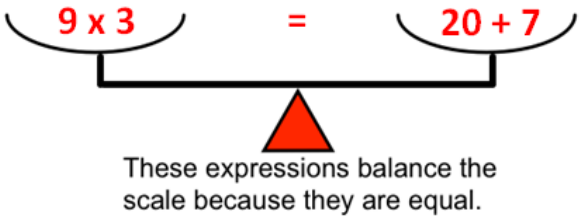
The quantity by which another quantity is to be divided.

equation

equation



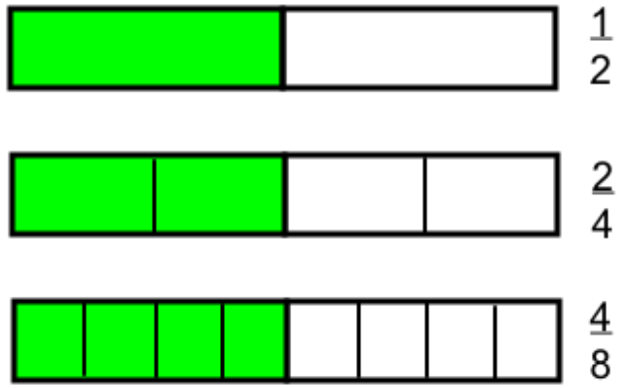
equation



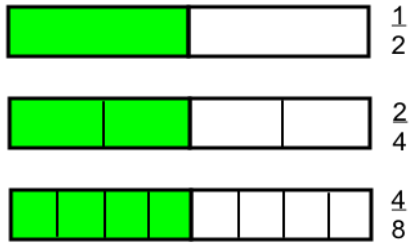
A statement that two mathematical expressions are equal.

equivalent fraction

equivalent fraction



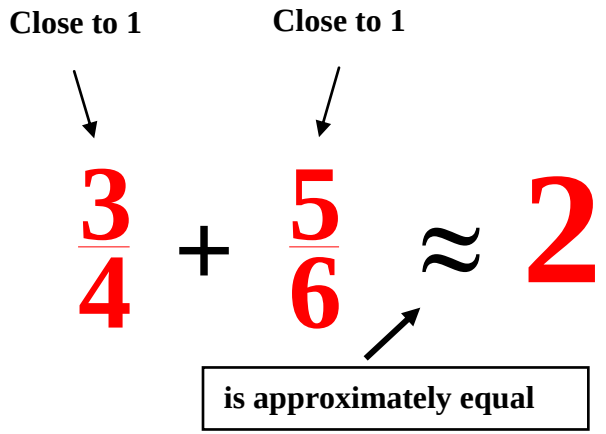
equivalent fraction



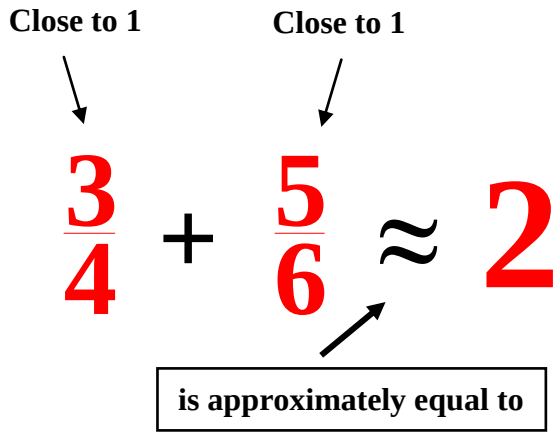
Fractions that have the same value.

estimate

estimate



estimate



A number close to an exact amount, an estimate tells *about* how much.

evaluate

---

evaluate

$$42 - 13 = n$$

$$n = 29$$

---

evaluate

$$42 - 13 = n$$

$$n = 29$$

To find the value of a mathematical expression.

expanded form

---

expanded form

347.392 =

3 x 100 + 4 x 10 + 7 x 1 +
3 x (1/10) + 9 x (1/100) +
2 x (1/1000)

---

expanded form

347.392 =

3 x 100 + 4 x 10 + 7 x 1 +
3 x (1/10) + 9 x (1/100) +
2 x (1/1000)

A way to write numbers that shows the place value of each digit.

exponent

exponent

10 x 10 x 10 x 10 = 10,000

exponent

10 x 10 x 10 x 10 = 10,000

The number that tells the number of times the base is multiplied by itself.

expression

---

expression $x + 3$

no equal sign.

---

expression $x + 3$

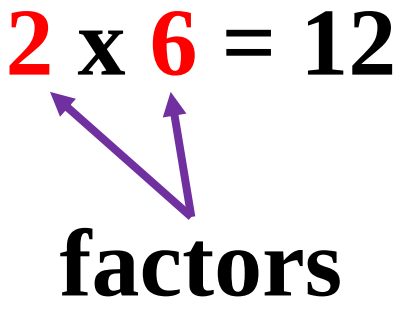
no equal sign.

A variable or combination of variables, numbers, and symbols that represents a mathematical relationship.

factor

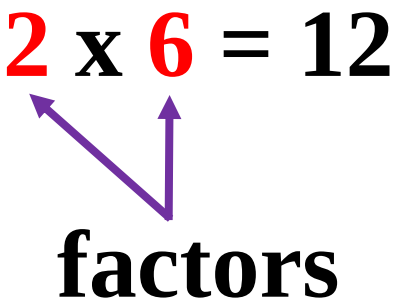
---

factor



---

factor



An integer that divides evenly into another.

finite decimal

---

finite decimal

Example:

0.25

---

finite decimal

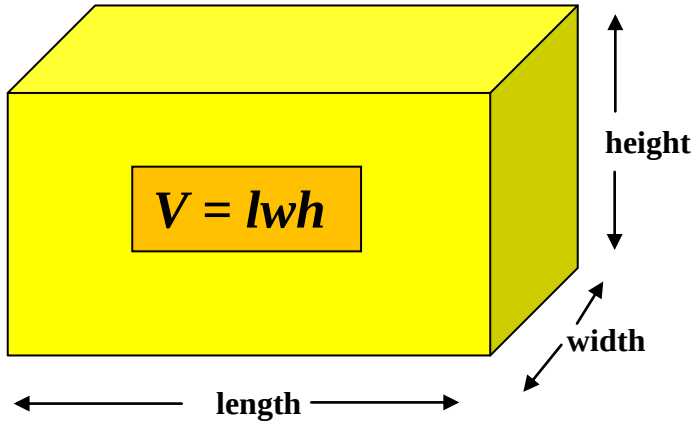
Example:

0.25

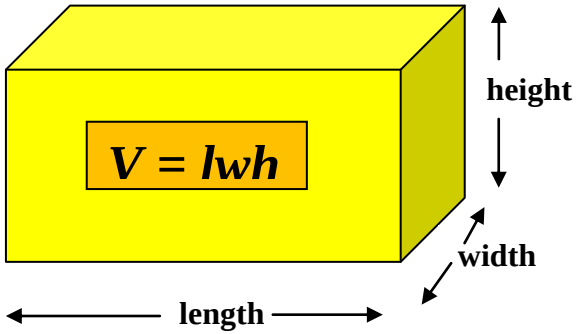
A decimal that contains a terminating number of digits. (Also called a *terminating decimal*.)

formula

formula



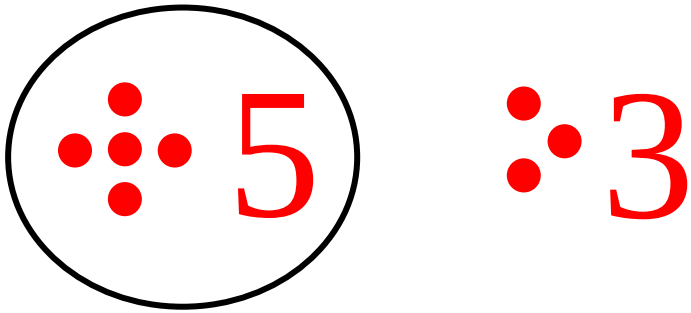
formula



A general equation or rule. You can use a formula to find volume in a rectangular prism.

greater than

greater than



5 > 3

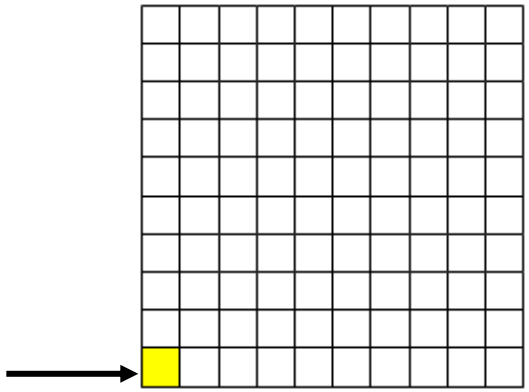
greater than

5 > 3

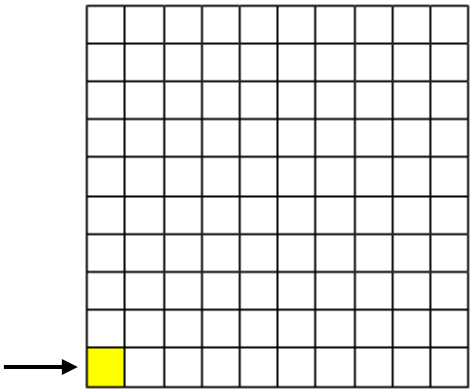
Greater than is used to compare two numbers when the first number is larger than the second number.

hundredth

hundredth



hundredth



One of 100 equal parts of a whole.

hundredths

hundredths

4.38

hundredths

4.38

In the decimal numeration system, hundredths is the name of the next place to the right of tenths.

improper fraction

---

improper fraction

$$\frac{7}{5} \leftarrow$$

Greater than
(or equal to)
denominator

---

improper fraction

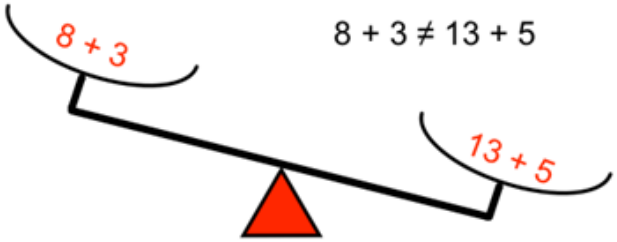
$$\frac{7}{5} \leftarrow$$

Greater than
(or equal to)
denominator

A fraction where the numerator is greater than or equal to the denominator.

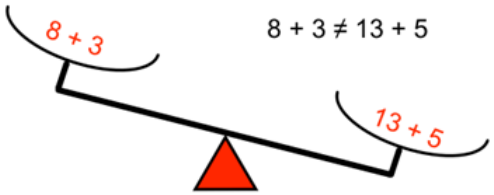
inequality

inequality



These expressions **do not** balance the scale because they are **not** equal.

inequality



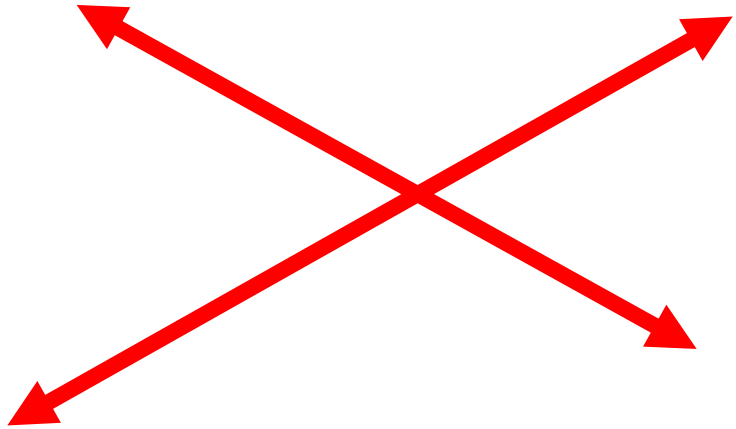
These expressions **do not** balance the scale because they are **not** equal.

A mathematical sentence that compares two unequal expressions using one of the symbols <, >, or ≠. e.g. 26 > 13; 13 < 26; 2 + 4 < 6 + 3

intersect

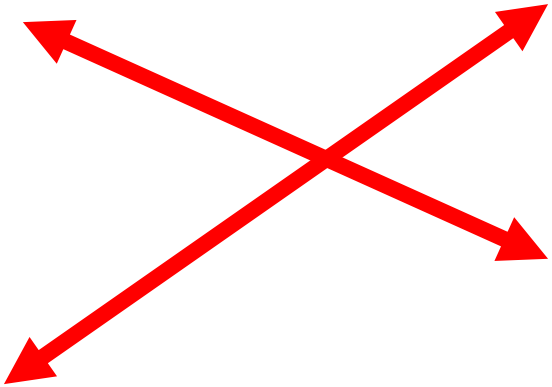
---

intersect



---

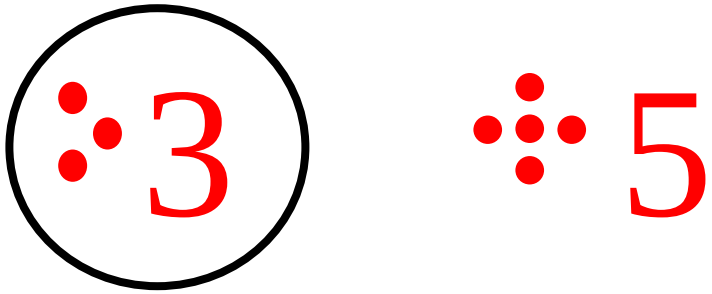
intersect



To meet or cross.

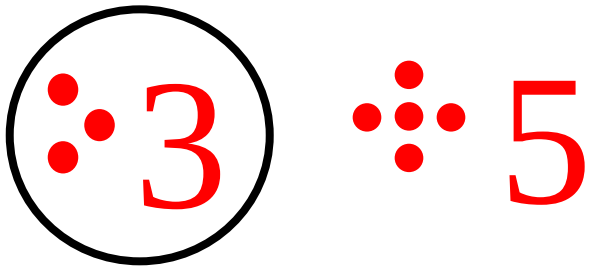
less than

less than



$3 < 5$

less than



$3 < 5$

Less than is used to compare two numbers when the first number is smaller than the second number.

like denominators

like denominators

$\frac{3}{8}$ $\frac{5}{8}$ $\frac{7}{8}$

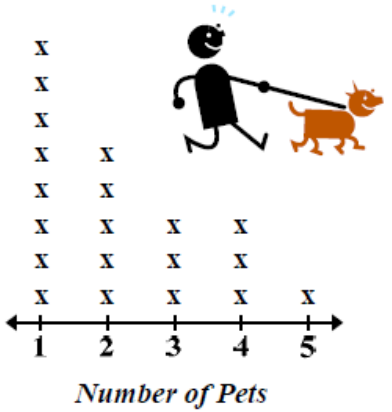
like denominators

$\frac{3}{8}$ $\frac{5}{8}$ $\frac{7}{8}$

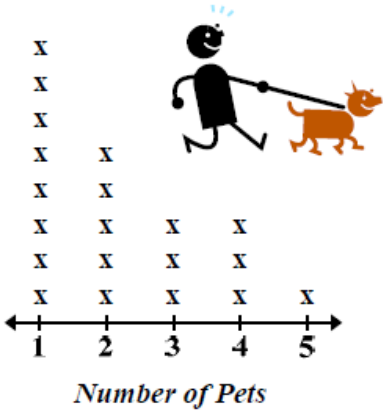
Denominators in two or more fractions that are the same.

line plot

line plot



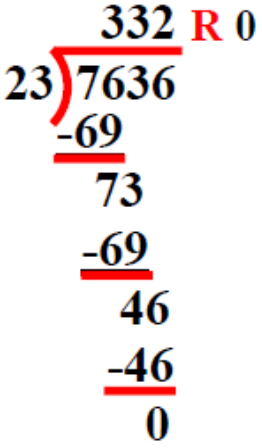
line plot



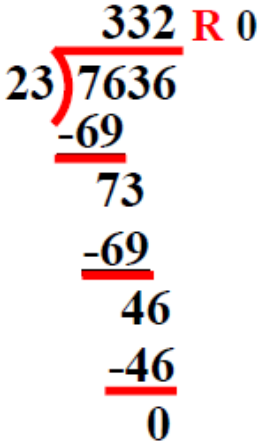
A diagram showing frequency of data on a number line.

long division

long division



long division



A standard procedure suitable for dividing simple or complex multi-digit numbers.

lowest terms

lowest terms

$\frac{4}{8}$ in lowest terms is $\frac{1}{2}$

lowest terms

$\frac{4}{8}$ in lowest terms is $\frac{1}{2}$

A fraction where the numerator and denominator have no common factor greater than 1.

meter (m)

---

meter (m)

A baseball bat is *about* 1 meter long.

---

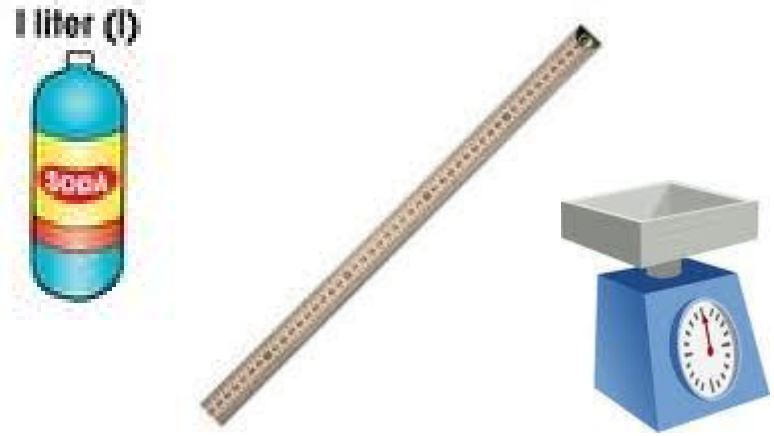
meter (m)

A standard unit of length
in the metric system.

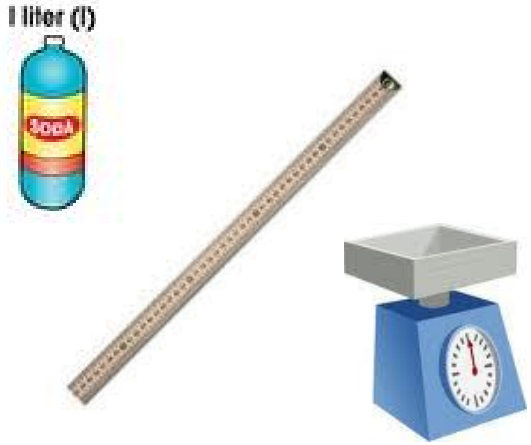
A baseball bat is *about* 1 meter long.

metric system

metric system



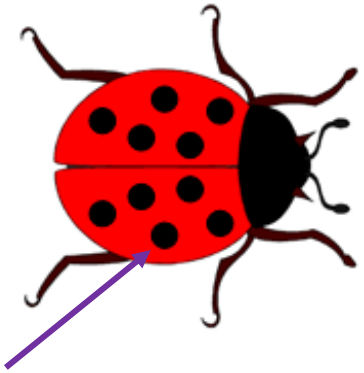
metric system



A system of measurement based on tens. The basic unit of capacity is the liter. The basic unit of length is the meter. The basic unit of mass is the gram.

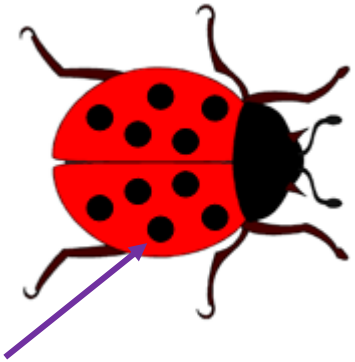
millimeter (mm)

millimeter (mm)



The dot on a ladybug is *about* 1 millimeter wide.

millimeter (mm)



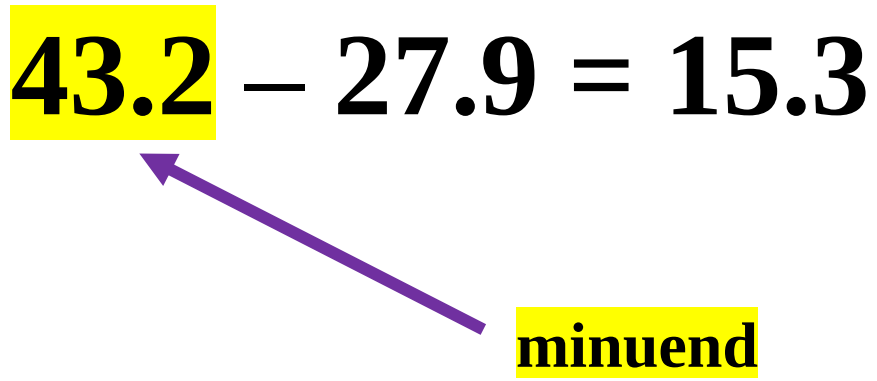
The dot on the ladybug is *about* 1 millimeter wide.

A metric unit of length. 1,000 millimeters = 1 meter

minuend

---

minuend



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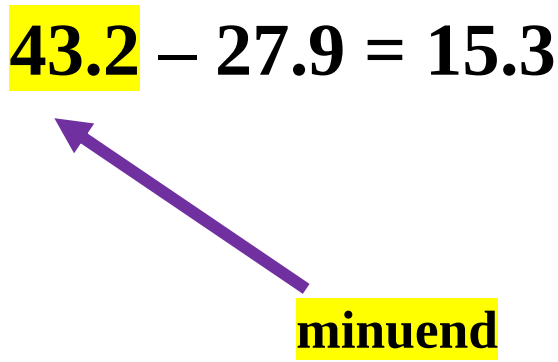
minuend



In subtraction, the minuend is the number you subtract from.

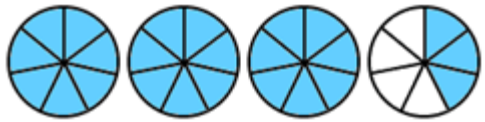
mixed number

---

mixed number

Example:

$3\frac{3}{7}$

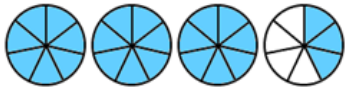


---

mixed number

Example:

$3\frac{3}{7}$



A number with an integer and a fraction part.

Multiplicative Identity Property of 1

Multiplicative Identity Property of 1

1 group of 3 = 3
1 x 3 = 3

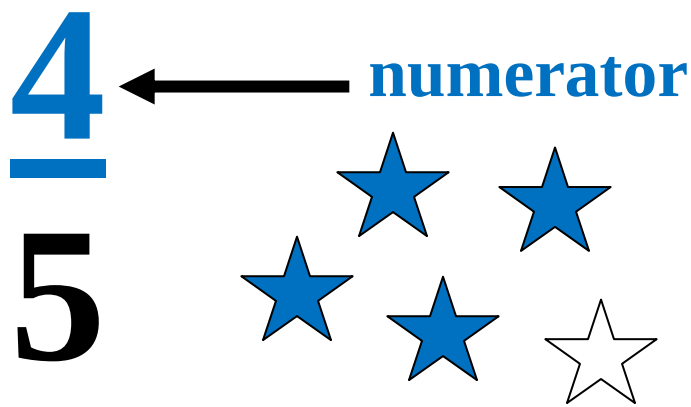
Multiplicative Identity Property of 1

1 group of 3 = 3
1 x 3 = 3

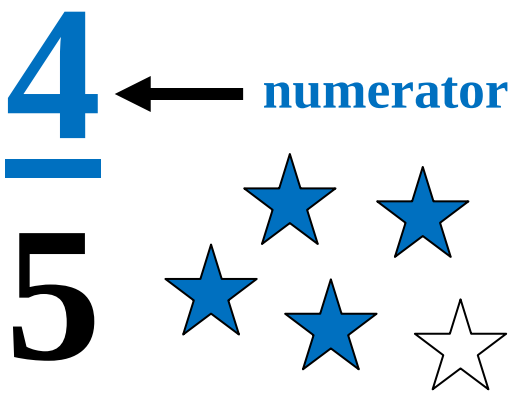
Multiplying a number by one gives a product identical to the given number. Also known as *Identity Property of Multiplication.*

numerator

numerator



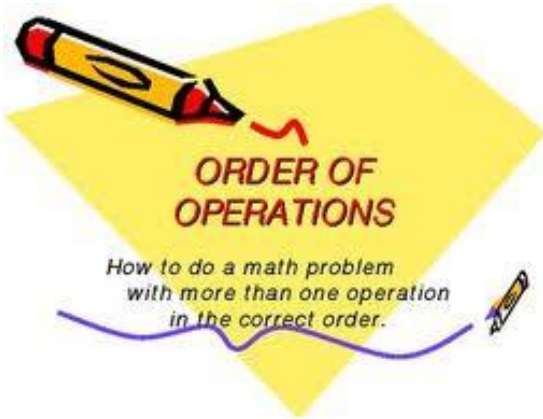
numerator



The number or expression written above the line in a fraction.

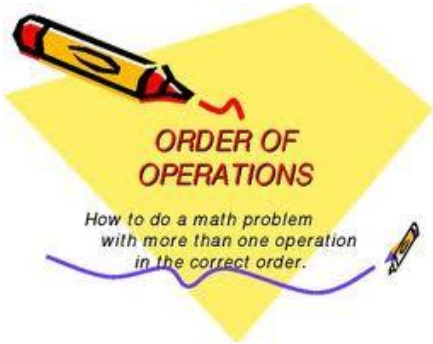
Order of Operations

Order of Operations



Parenthesis
Exponents
Multiply / **D**ivide
Add + **S**ubtract

Order of Operations



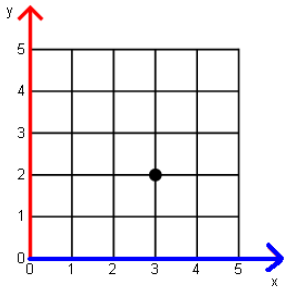
Parenthesis
Exponents
Multiply / **D**ivide
Add + **S**ubtract

An order, agreed on by mathematicians, for performing operations to simplify expressions.

ordered pair

---

ordered pair

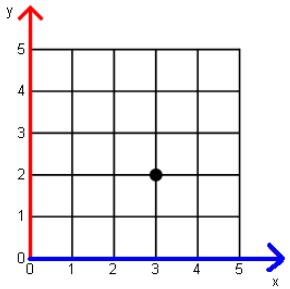


(3, 2)

$(x\ ,y)$

---

ordered pair



(3, 2)

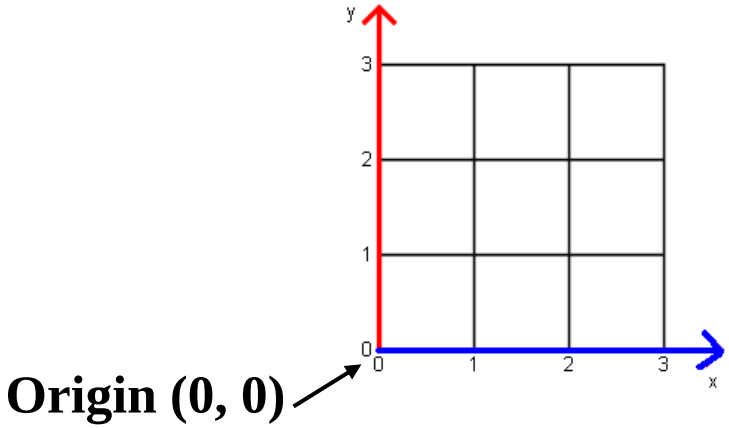
$(x\ ,y)$

A pair of numbers that gives the coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate).

origin

---

origin



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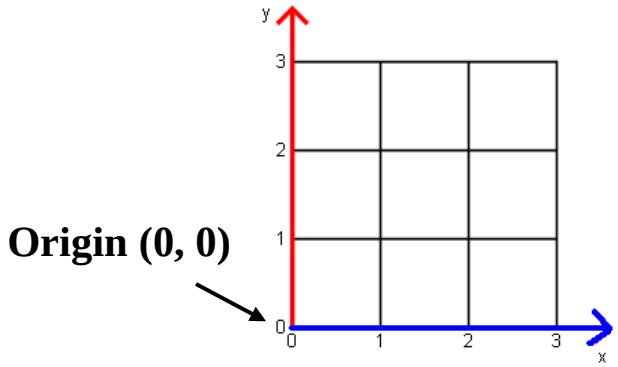
origin



The intersection of the *x*- and *y*-axes in a coordinate plane, described by the ordered pair (0, 0).

parentheses

parentheses
( )

(2 + 3) x 4
5 x 4
20

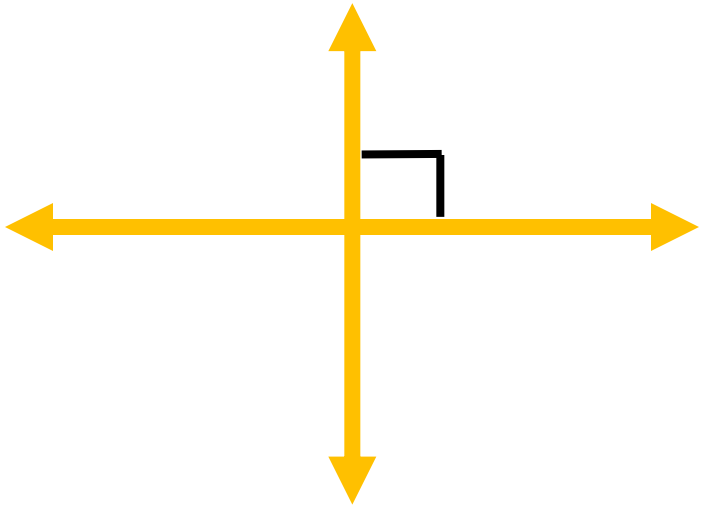
parentheses
( )

(2 + 3) x 4
5 x 4
20

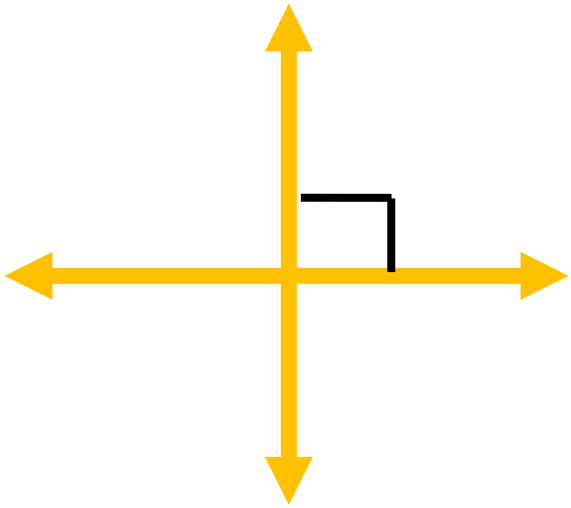
Used in mathematics as grouping symbols for operations. When simplifying an expression, the operations within the parentheses are performed first.

perpendicular

perpendicular



perpendicular



Forming right angles.

place value

place value

MILLIONS				THOUSANDS				ONES		
hundred millions	ten millions	millions	,	hundred thousands	ten thousands	thousands	,	hundreds	tens	ones
7	4	5	,	3	0	9	,	2	8	1

place value

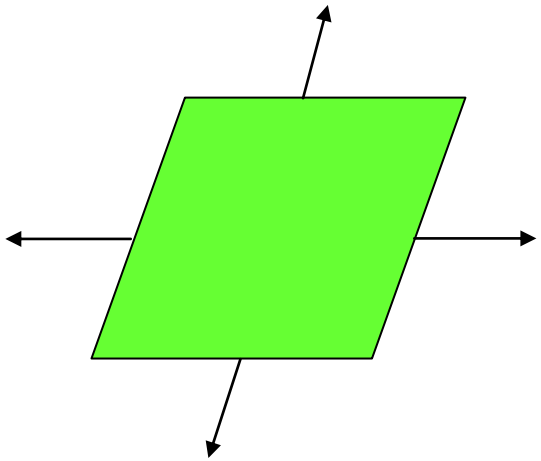
MILLIONS				THOUSANDS				ONES		
hundred millions	ten millions	millions	,	hundred thousands	ten thousands	thousands	,	hundreds	tens	ones
7	4	5	,	3	0	9	,	2	8	1

The value of the place of a digit in a number.

plane

---

plane



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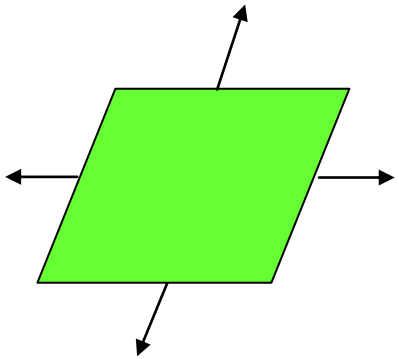
plane



A flat surface that extends infinitely in all directions.

powers of ten

powers of ten

10 000	=	10^4
1 000	=	10^3
100	=	10^2
10	=	10^1
1	=	10^0

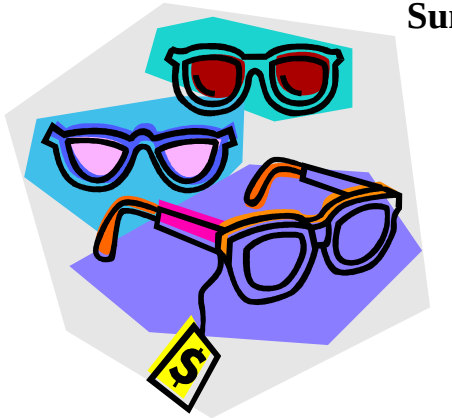
powers of ten

10 000	=	10^4
1 000	=	10^3
100	=	10^2
10	=	10^1
1	=	10^0

Using a base number of 10 with an exponent. Our number system is based on the powers of 10.

product

product



Sunglasses are $9.95 a pair.

$ 9.95
x 3
$29.85

product

product

Sunglasses are $9.95 a pair.

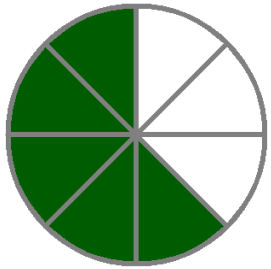
$ 9.95
x 3
$29.85

product

The result of multiplication.

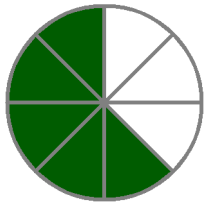
proper fraction

proper fraction



$\frac{5}{8}$ **less than the denominator**

proper fraction

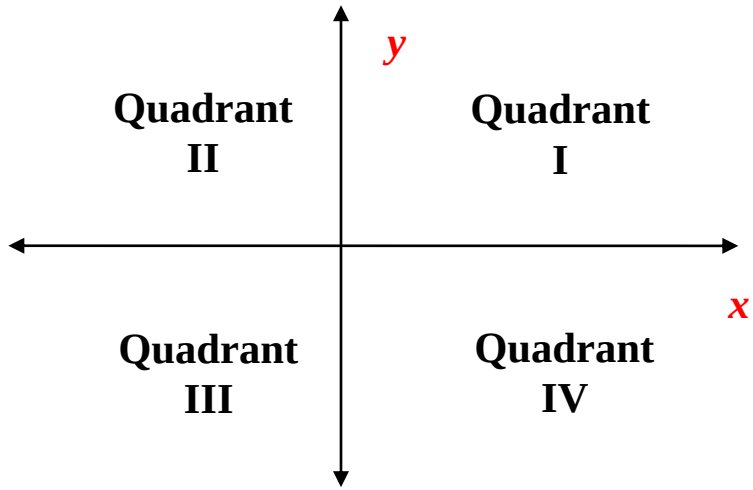


$\frac{5}{8}$ **less than the denominator**

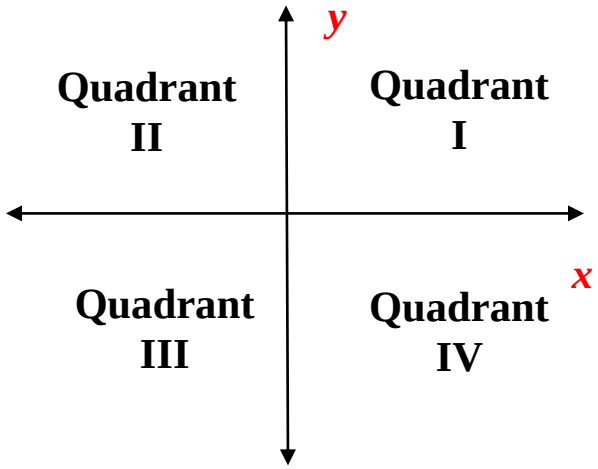
A fraction less than one. In a proper fraction the numerator is less than the denominator.

quadrants

quadrants



quadrants

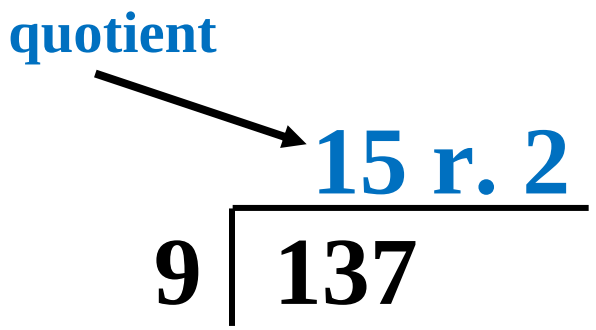


The four sections of a coordinate grid that are separated by the axes.

quotient

---

quotient



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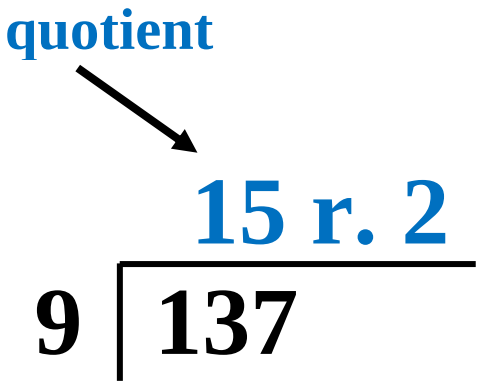
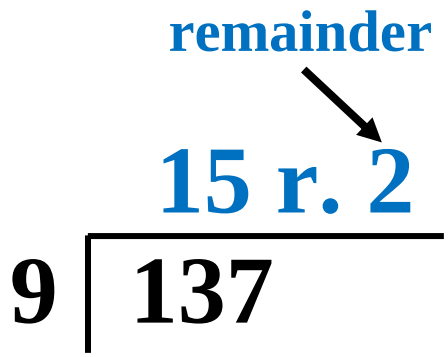
quotient



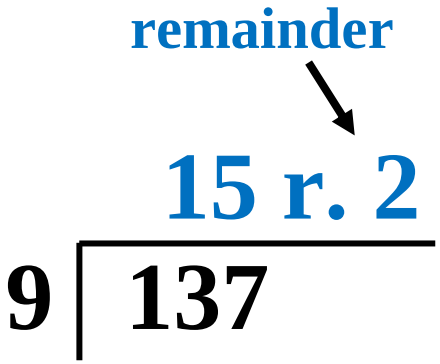
The result of the division of one quantity by another.

remainder

remainder



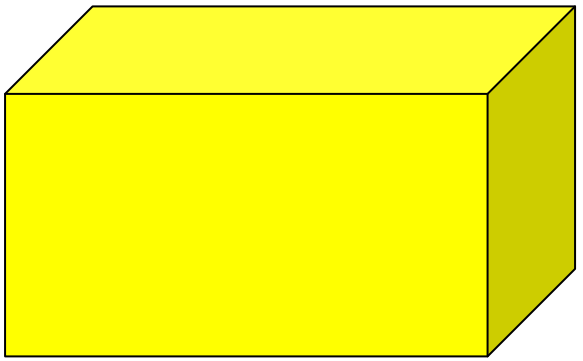
remainder



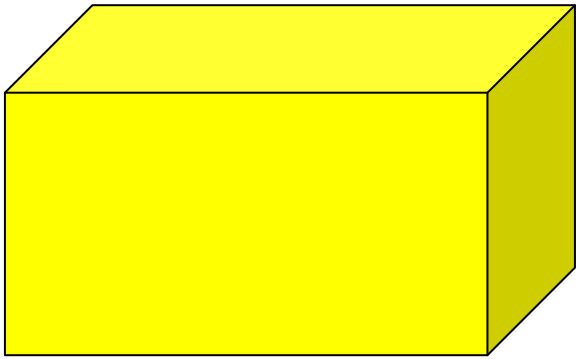
The number that is left over after a whole number is divided equally by another.

right rectangular prism

right rectangular prism



right rectangular prism

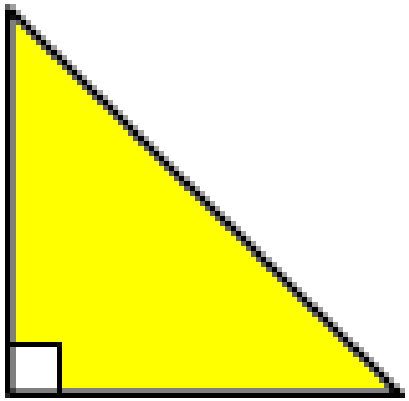


A prism with six rectangular faces where the lateral edge is perpendicular to the plane of the base.

right triangle

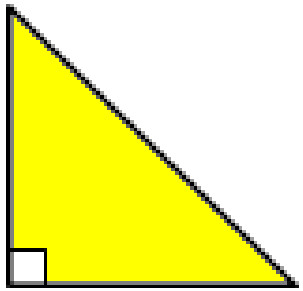
---

right triangle



---

right triangle



A triangle that has one 90º angle.

rounding

rounding 45.357 → 45.4

rounding 45.357 → 45.4

To strategy to find about how much or how many by expressing a number closest to ten, hundred, thousand, or tenth, hundredth, thousandth, etc.

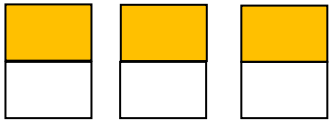
scaling

scaling

3×2

Note: Product is greater than 3.

$3 \times \frac{1}{2}$



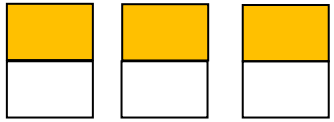
Note: Product is less than 3.

scaling

3×2

Note: Product is greater than 3.

$3 \times \frac{1}{2}$



Note: Product is less than 3.

To increase or decrease proportionately in size.

sequence

---

sequence

2, 5, 8, 11, 14, 17…

What is the pattern?

---

sequence

2, 5, 8, 11, 14, 17…

What is the pattern?

A set of numbers arranged in a special order or pattern.

simplest form

simplest form

A fraction in simplest form has the fewest possible pieces.

simplest form

A fraction in simplest form has the fewest possible pieces.

A fraction is in simplest form when the greatest common factor of the numerator and denominator is 1.

simplify

simplify

simplify

To express a fraction in simplest form.

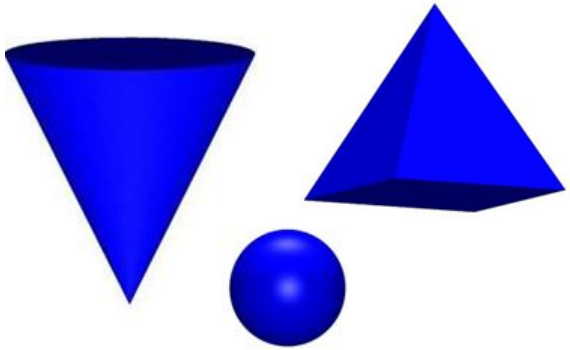
solid figure

---

solid figure

---

solid figure



A geometric figure with 3 dimensions.

standard form

---

standard form

354,973

---

standard form

354,973

A number written with one digit for each place value.

subtrahend

subtrahend

$$\begin{array}{r} 27.34 \\ -\ 8.29 \\ \hline 19.05 \end{array}$$ ← **subtrahend**

subtrahend

$$\begin{array}{r} 27.34 \\ -\ 8.29 \\ \hline 19.05 \end{array}$$ ← **subtrahend**

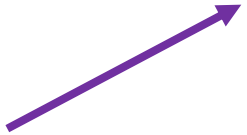
In subtraction, the subtrahend is the number being subtracted.

sum

---

sum

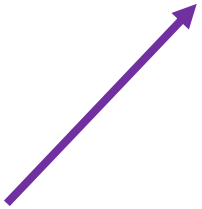
45.3 + 92.9 = 138.2



sum

45.3 + 92.9 = 138.2

sum

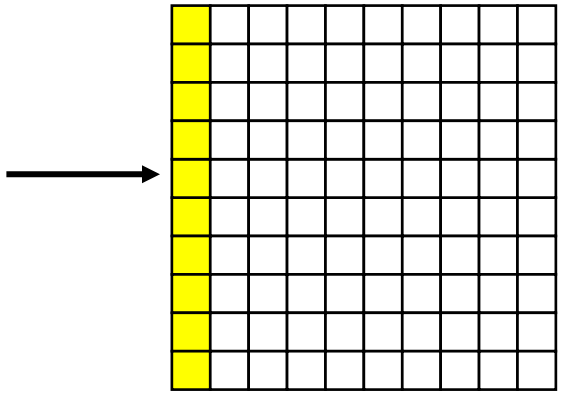


sum

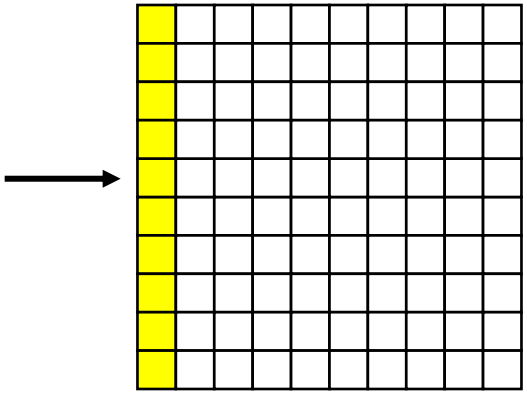
The result of addition.

tenth

tenth



tenth



One of the equal parts when a whole is divided into 10 equal parts.

tenths

tenths

tenths

In the decimal numeration, tenths is the name of the place to the right of the decimal point.

term

---

term

$x + 14$

terms

---

term

$x + 14$

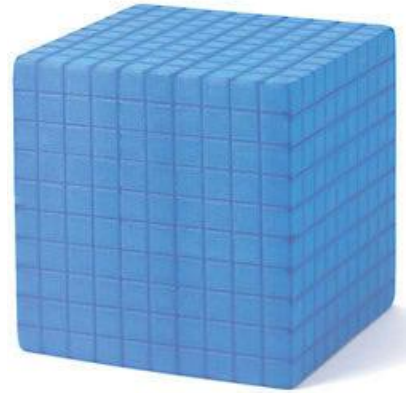
terms

A number, variable, product, or quotient in an expression. A term is *not* a sum or difference.

thousandth

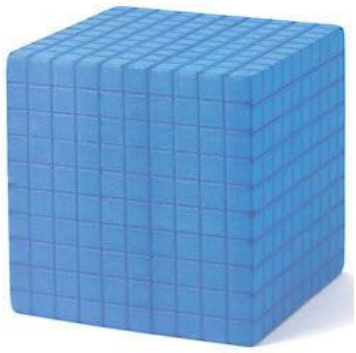
thousandth

0.001 or $\frac{1}{1000}$



thousandth

0.001 or $\frac{1}{1000}$



One of 1000 equal parts of a whole.

thousandths

thousandths 0.276

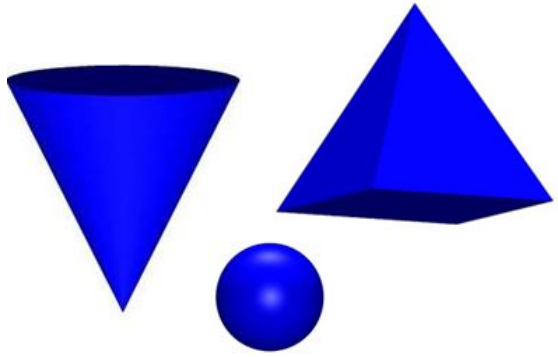
thousandths 0.276

Thousandths is the name of the next place to the right of hundredths in the decimal numeration system.

three-dimensional figures

three-dimensional figures

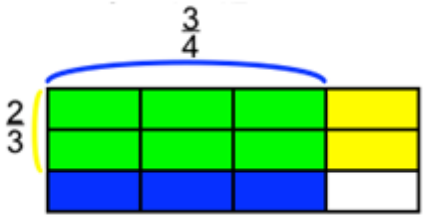
three-dimensional figures



A geometric figure that has length, width, and height.

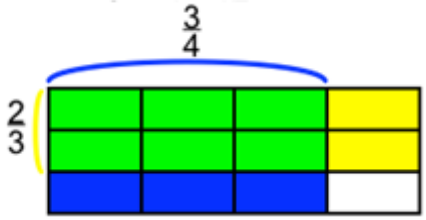
tiling

tiling



$\frac{2}{3}$ **of** $\frac{3}{4} = \frac{6}{12}$

tiling



$\frac{2}{3}$ **of** $\frac{3}{4} = \frac{6}{12}$

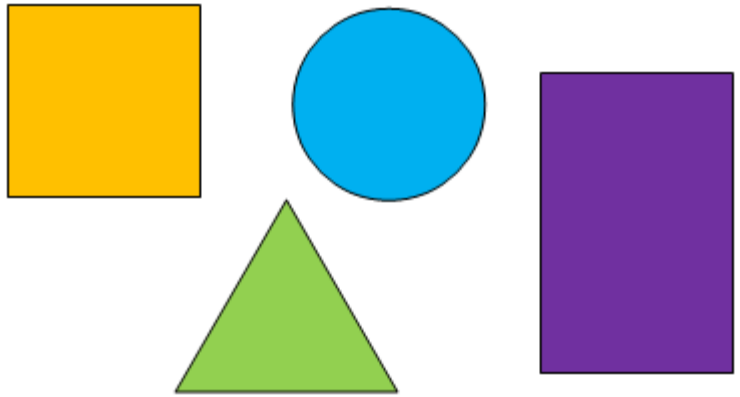
Repeated shapes that fill a plane. The shapes do not overlap and there are no gaps.

You can find the area of a rectangle with fractional lengths by tiling it with appropriate unit squares. The green area represents

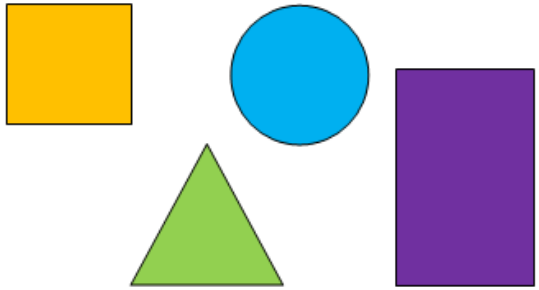
$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$

two-dimensional figures

two-dimensional figures



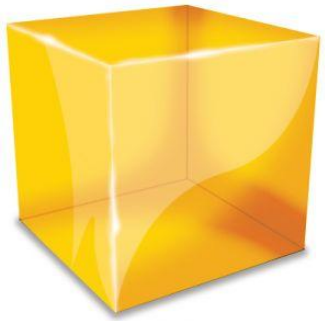
two-dimensional figures



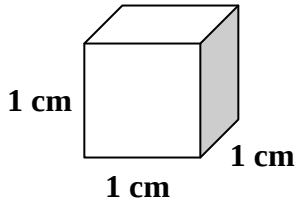
Having length and width. Having area, but not volume. Also called a plane figure.

unit cube

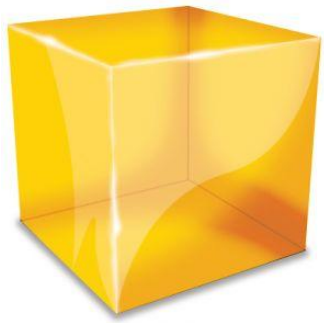
unit cube



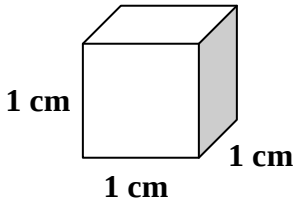
Volume of 1 cubic (cm^3) centimeter



unit cube



Volume of 1 cubic (cm^3) centimeter



A precisely fixed quantity used to measure volume.

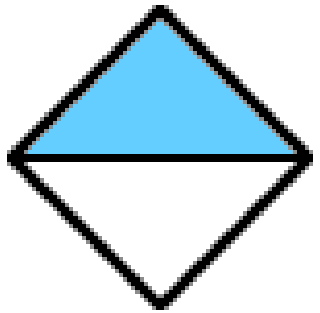
unit fraction

---

unit fraction

$\frac{1}{2}$

Example



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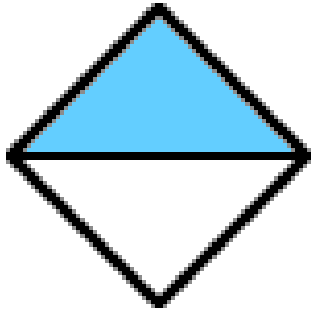
unit fraction

$\frac{1}{2}$

Example



A fraction with a numerator of 1.

unlike denominators

---

unlike denominators

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$

---

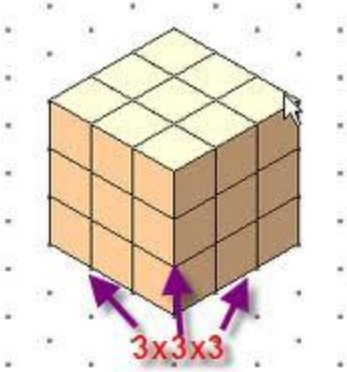
unlike denominators

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$

Denominators that are not equal.

volume

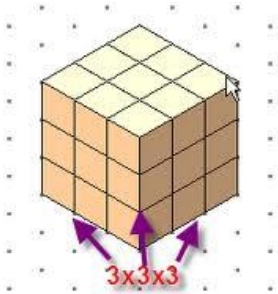
volume



Volume =

27 cubic units

volume



Volume =

27 cubic units

The number of cubic units it takes to fill a figure.

whole numbers

---

whole numbers

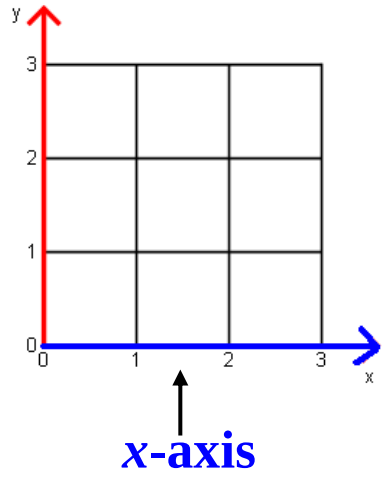
---

whole numbers

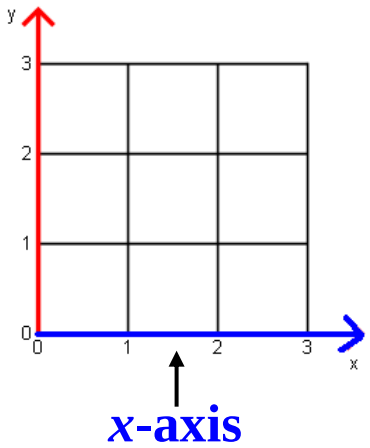
Whole numbers are zero and the counting numbers 1, 2, 3, 4, 5, 6, and so on. If a number has a negative sign, a decimal point, or a part that's a fraction, it is not a whole number.

x-axis

x-axis



x-axis



In a coordinate plane, the horizontal axis.

x-coordinate

---

x-coordinate

(7, 2)

x-coordinate

---

x-coordinate

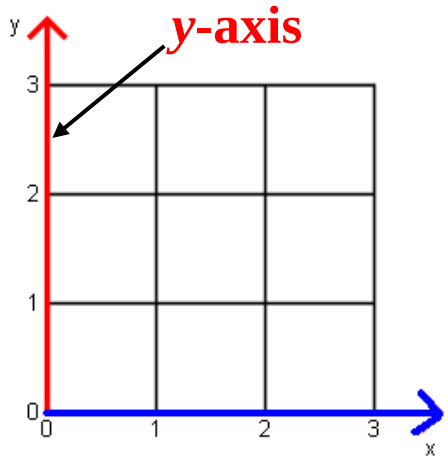
(7, 2)

x-coordinate

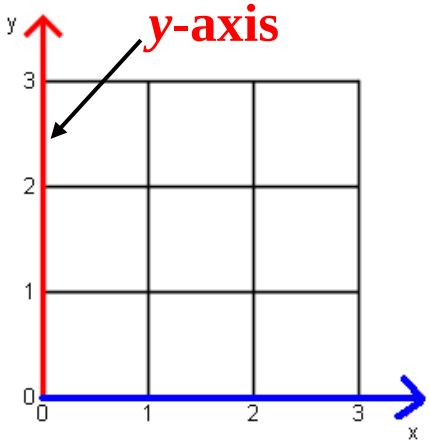
In an ordered pair, the value that is always written first.

y-axis

y-axis



y-axis



In a coordinate plane, the vertical axis.

y-coordinate

---

y-coordinate

(7, 2)

y-coordinate

---

y-coordinate

(7, 2)

y-coordinate

In an ordered pair, the value that is always written second.