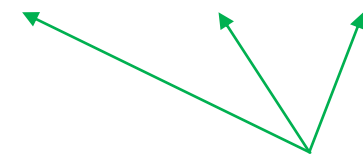


addend

addend

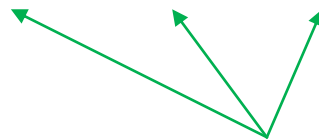
$$33 + 4.7 + 0.9 = 38.6$$



addends

addend

$$33 + 4.7 + 0.9 = 38.6$$



addends

Any number being
added.

algorithm

Partial Product Example

algorithm

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

Partial Product Example

algorithm

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

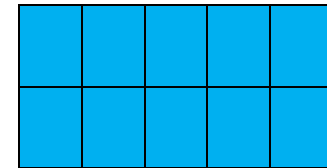
Step-by-step method
for computing.

area

area

2 rows of 5 = 10 square units
or

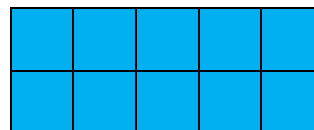
2 x 5 = 10 square units



area

2 rows of 5 = 10 square units
or

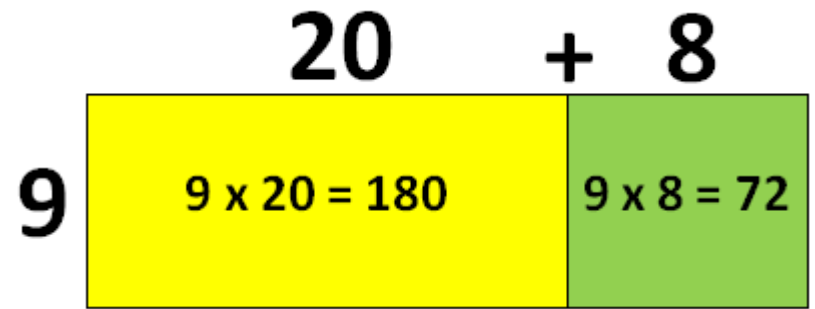
2 x 5 = 10 square units



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

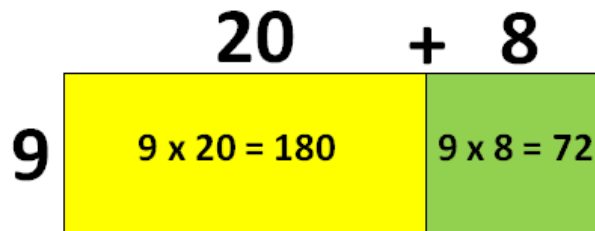
area model

area model



$$9 \times 28 = (9 \times 20) + (9 \times 8) = 252$$

area model



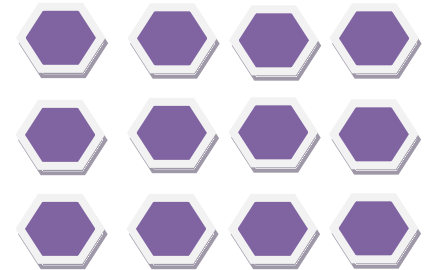
$$9 \times 28 = (9 \times 20) + (9 \times 8) = 252$$

A model of multiplication that shows each place value product

array

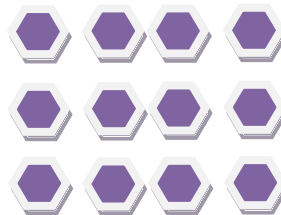
array

3 rows of 4
or
3 x 4



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**

$$(5 \times 7) \times 3 = 5 \times (7 \times 3)$$

$$35 \times 3 = 5 \times 21$$

$$105 = 105$$

**Associative
Property of
Multiplication**

$$(5 \times 7) \times 3 = 5 \times (7 \times 3)$$

$$35 \times 3 = 5 \times 21$$

$$105 = 105$$

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

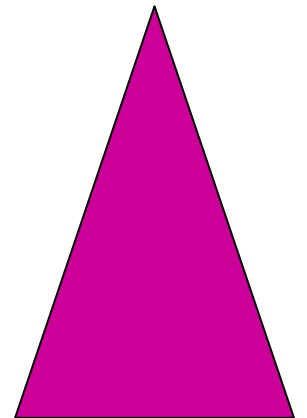
attribute

attribute

large

triangle

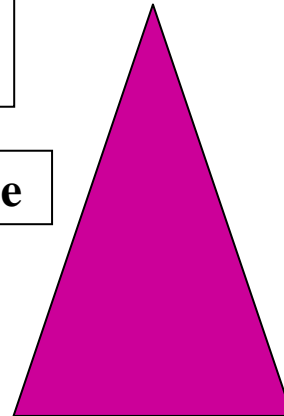
pink



large

triangle

pink

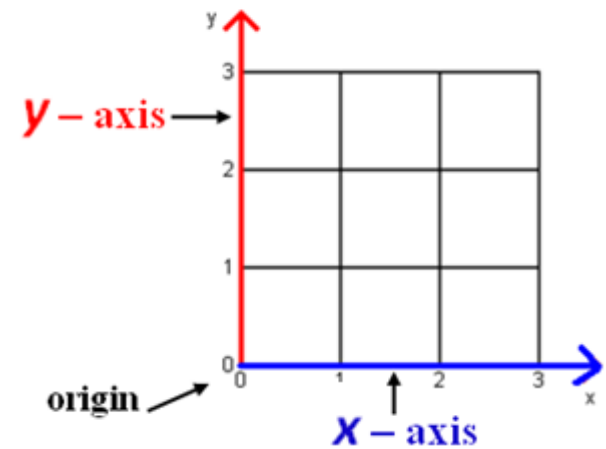


A characteristic.
e.g. size, shape or color

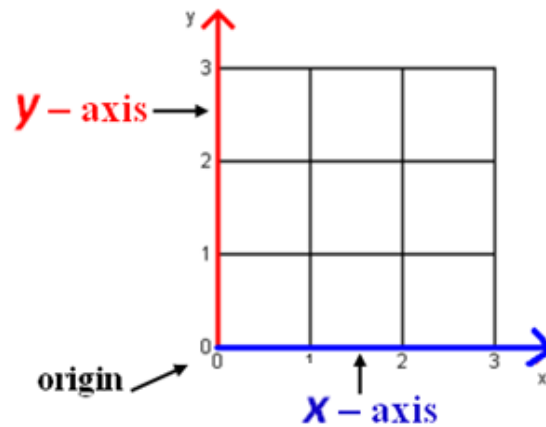
attribute

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 → 10⁴ ← Exponent

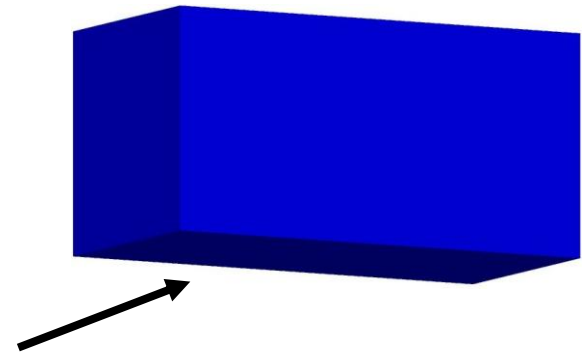
base of an
exponent

base → 10⁴ ← Exponent

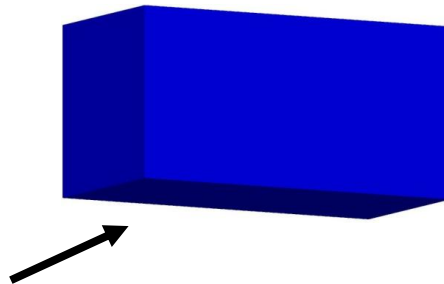
The number that is raised to a power. In 10^4 , 10 is the base and 4 is the exponent. 10 is raised to the power of 4. ($10^4 = 10 \times 10 \times 10 \times 10 = 10,000$)

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

**benchmark
fractions**

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

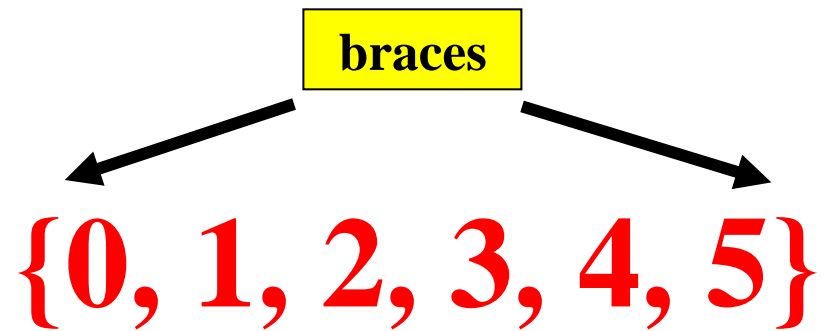
**benchmark
fractions**

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

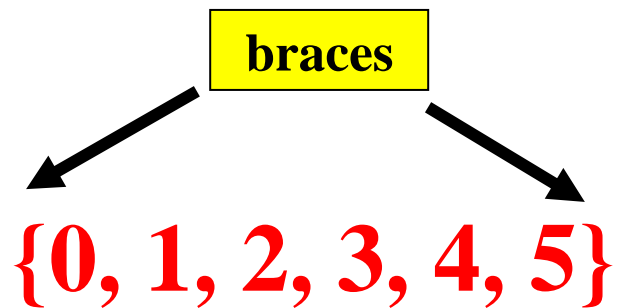
Fractions that are
commonly used for
estimation.

braces

braces



braces



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

brackets

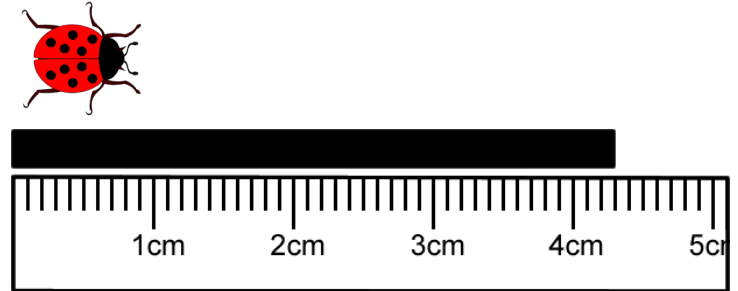
brackets $[(2 \times 20) + 6]$

brackets $[(2 \times 20) + 6]$

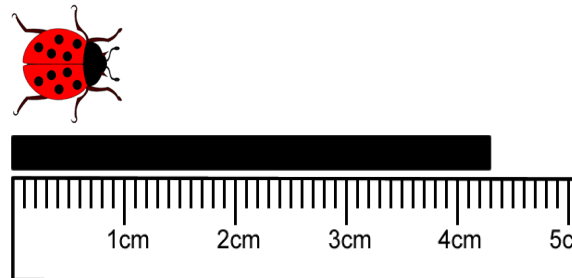
A type of grouping symbol used in pairs that tells what operation to complete first.

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

$$5 + 3 = 3 + 5$$

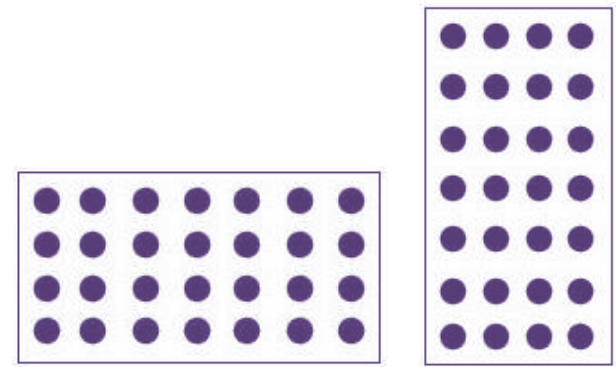
Commutative
Property of
Addition

$$5 + 3 = 3 + 5$$

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.

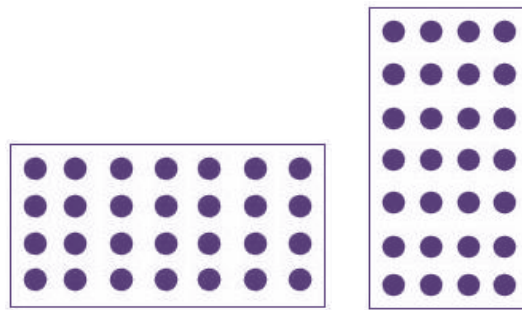
Commutative Property of Multiplication

Commutative Property of Multiplication



$$4 \times 7 = 7 \times 4$$

Commutative Property of Multiplication

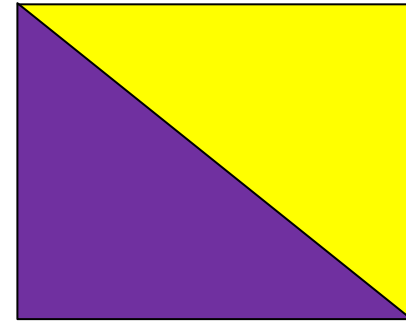


$$4 \times 7 = 7 \times 4$$

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.

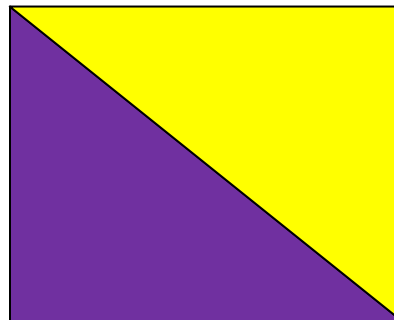
compose

compose



2 triangles can form a rectangle

compose

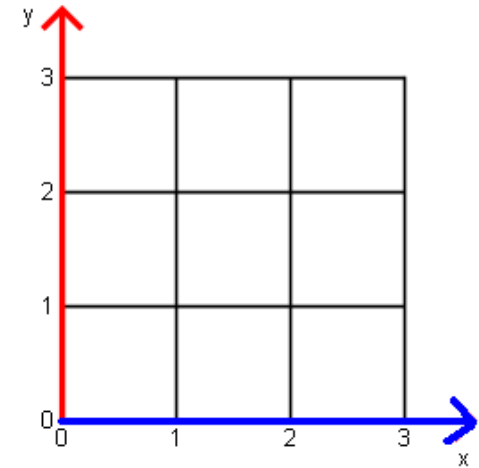


2 triangles can form a rectangle

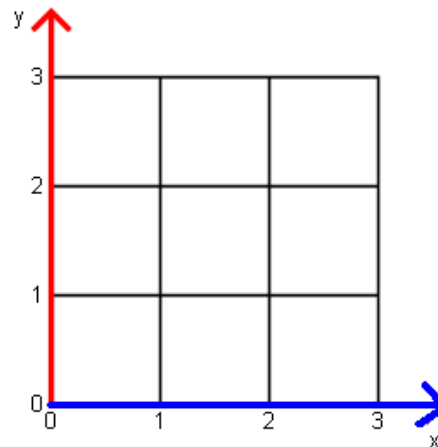
To put together, as in
numbers or shapes.

coordinate plane

coordinate plane



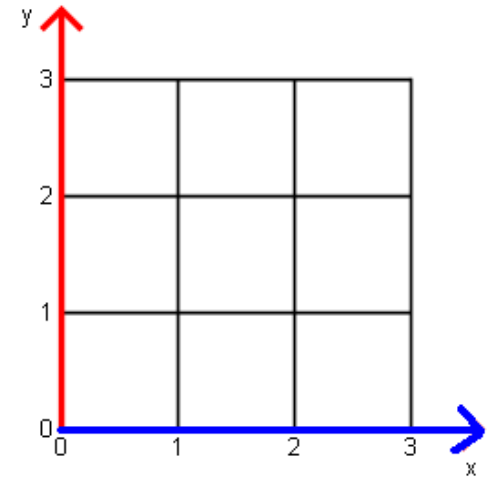
coordinate plane



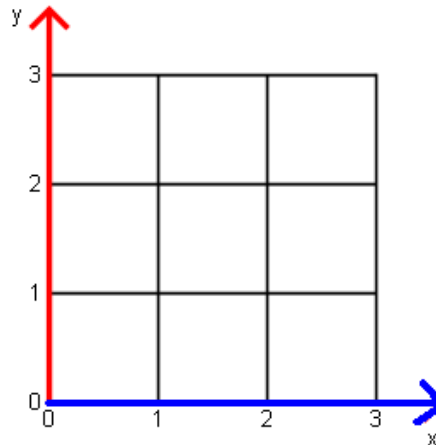
A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called coordinate *grid* or coordinate *system*.)

coordinate system

coordinate system



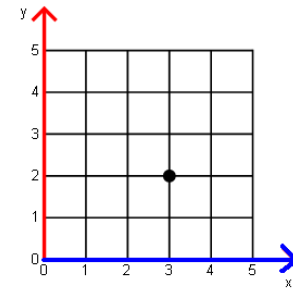
coordinate system



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.

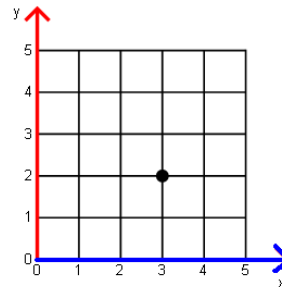
coordinates

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



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

corresponding terms



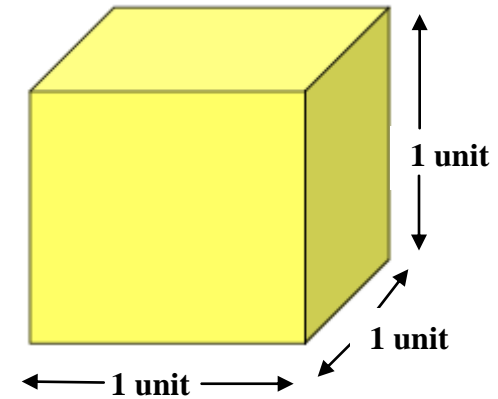
	1 st Term	2 nd Term	3 rd Term	4 th Term
Add 3	3	6	9	12
Add 6	6	12	18	24

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

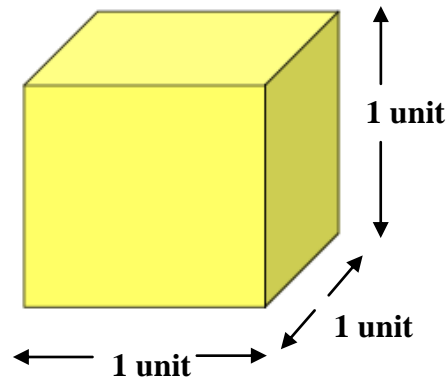
In the pattern shown, 9 and 18 are the 3rd terms in each sequence—they are corresponding terms.

cubic unit

cubic unit



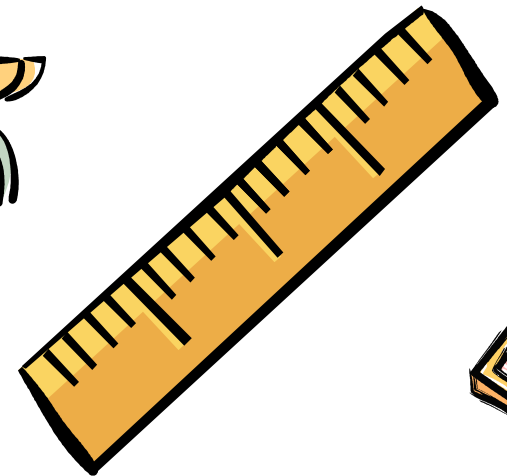
cubic unit



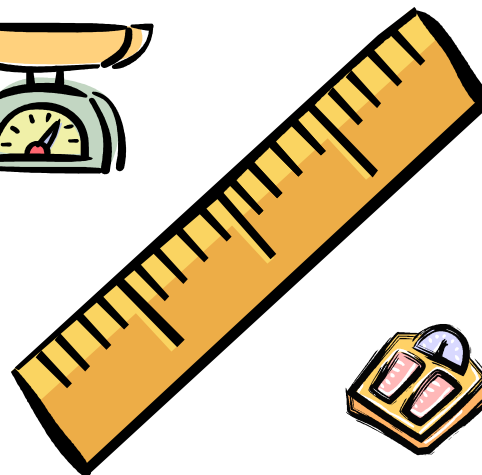
A unit such as a cubic meter to measure volume or capacity.

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
1 st Grade	15
2 nd Grade	34
3 rd Grade	9
4 th Grade	16
5 th Grade	29
6 th Grade	11

data



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

Information, especially numerical information. Usually organized for analysis.

decimal

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

decimal
point

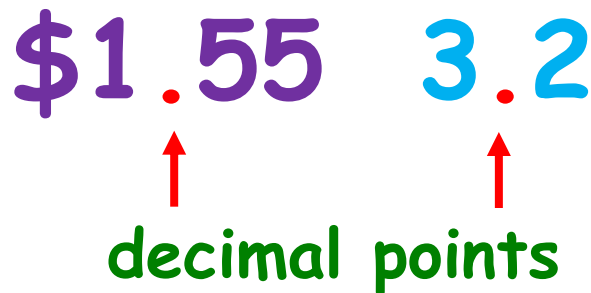
\$1.55 3.2



decimal points

decimal
point

\$1.55 3.2

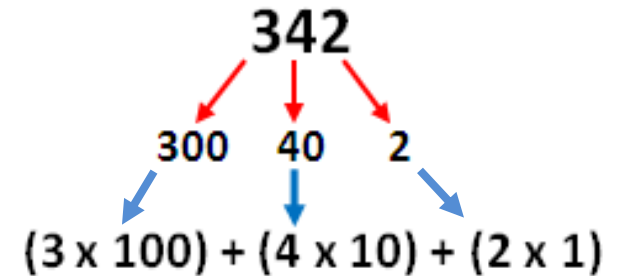


decimal points

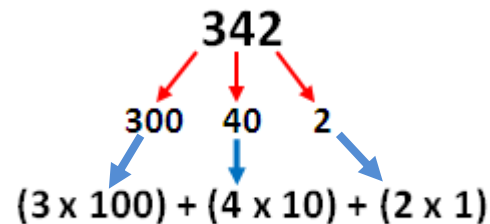
A dot separating the whole number from the fraction in decimal notation.

decompose

decompose



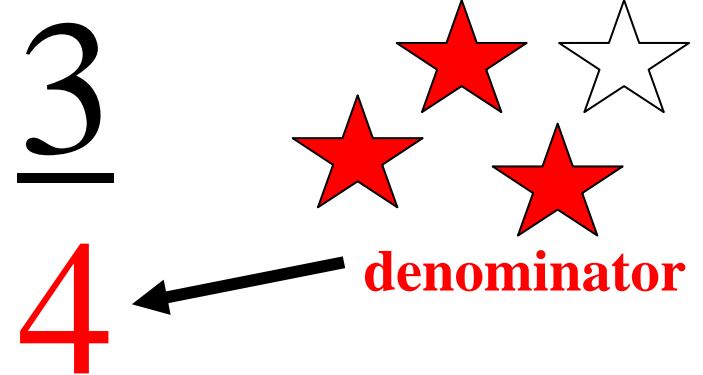
decompose



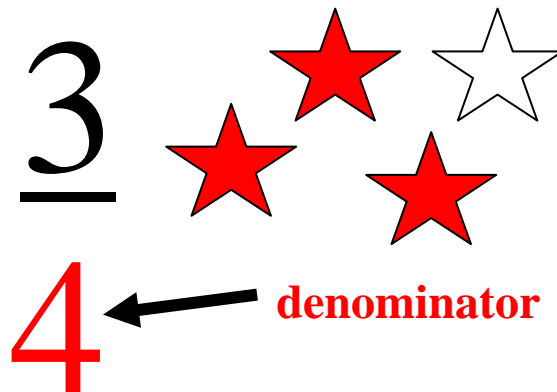
To separate into
components or basic
elements.

denominator

denominator



denominator



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

difference

difference

$$49.75 - 13.9 = 35.85$$

difference



difference

$$49.75 - 13.9 = 35.85$$

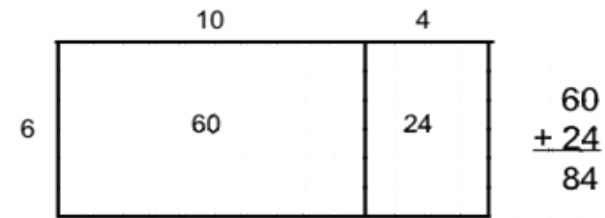
difference



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

Distributive Property

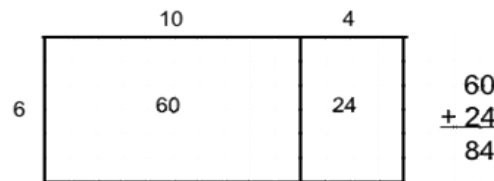
Distributive Property



$$6 \times 14 = 6 \times (10 + 4) \text{ *Break up the 14 into } 10 + 4$$

$$\begin{array}{l} \text{60} \\ \text{+ 24} \\ \hline \text{84} \end{array}$$

Distributive Property



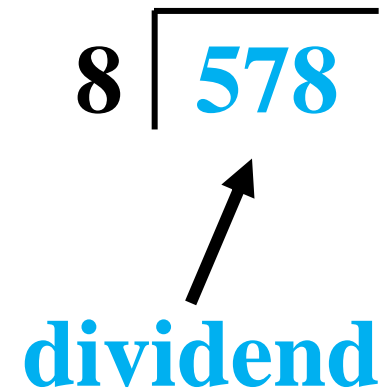
$$6 \times 14 = 6 \times (10 + 4) \text{ *Break up the 14 into } 10 + 4$$

$$\begin{array}{l} \text{60} \\ \text{+ 24} \\ \hline \text{84} \end{array}$$

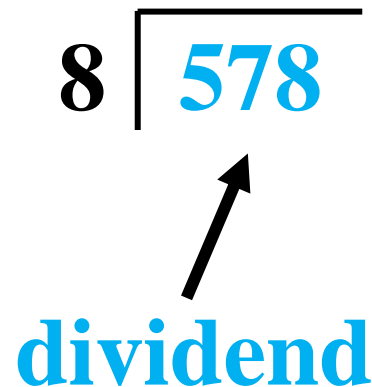
When one of the factors of a product is a sum, multiplying each addend before adding does not change the product.

dividend

dividend



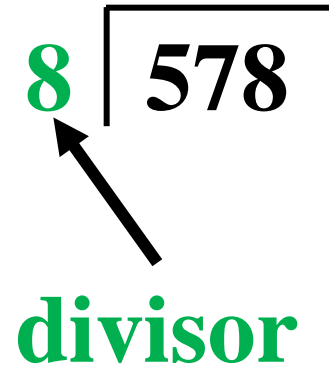
dividend



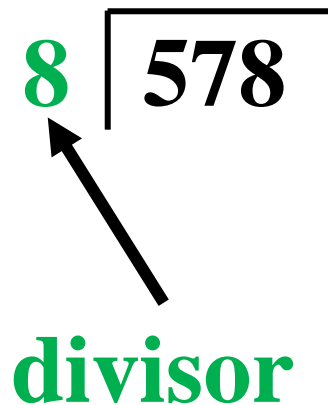
A quantity to be divided.

divisor

divisor



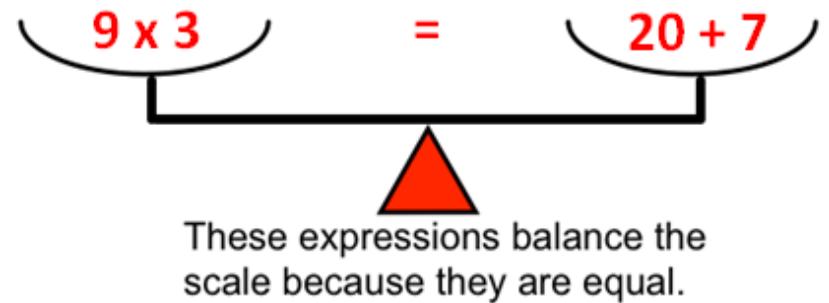
divisor



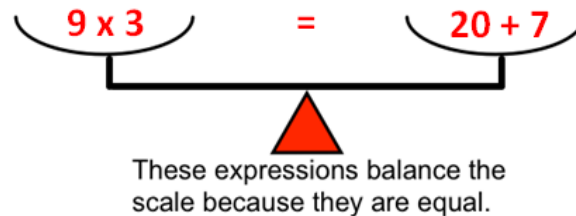
The quantity by which
another quantity is to be
divided.

equation

equation



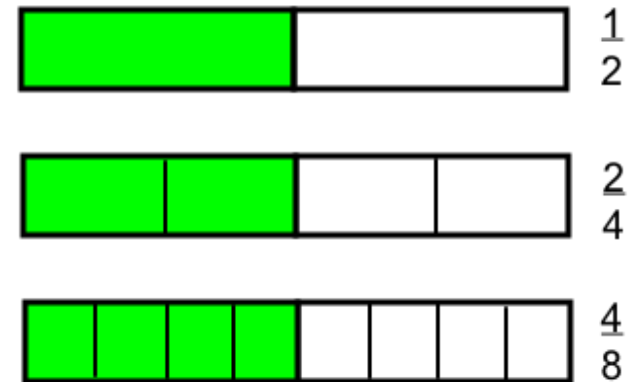
equation



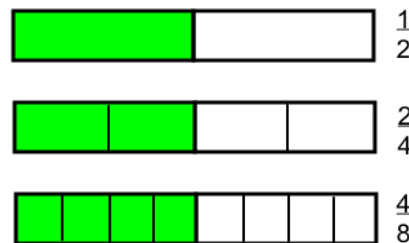
A statement that two mathematical expressions are equal.

equivalent fraction

equivalent
fraction



equivalent
fraction



Fractions that have the
same value.

estimate

estimate

Close to 1 Close to 1

↓ ↓

$$\frac{3}{4} + \frac{5}{6} \approx 2$$

is approximately equal

estimate

Close to 1 Close to 1

↓ ↓

$$\frac{3}{4} + \frac{5}{6} \approx 2$$

is approximately equal to

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

$$347.392 =$$
$$3 \times 100 + 4 \times 10 + 7 \times 1 +$$
$$3 \times (1/10) + 9 \times (1/100) +$$
$$2 \times (1/1000)$$

expanded form

$$347.392 =$$
$$3 \times 100 + 4 \times 10 + 7 \times 1 +$$
$$3 \times (1/10) + 9 \times (1/100) +$$
$$2 \times (1/1000)$$

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

exponent

exponent



$$10 \times 10 \times 10 \times 10 = 10,000$$

exponent



$$10 \times 10 \times 10 \times 10 = 10,000$$

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

$$2 \times 6 = 12$$

factors

factor

$$2 \times 6 = 12$$

factors

An integer that divides evenly into another.

finite decimal

finite
decimal

Example:

0.25

finite
decimal

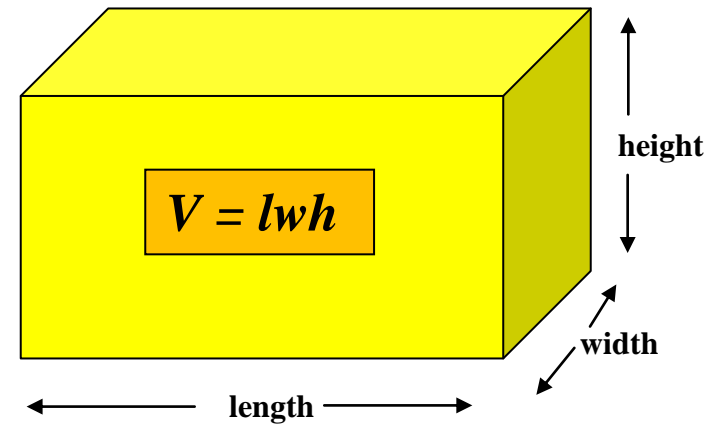
Example:

0.25

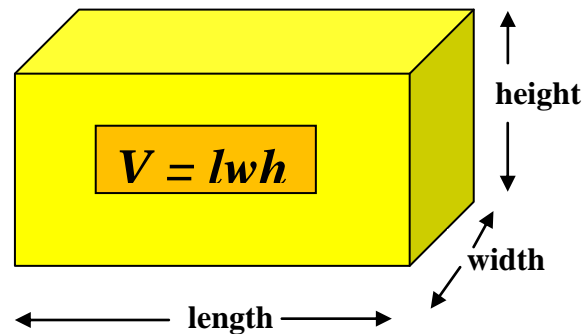
A decimal that contains a terminating number of digits. (Also called a *terminating decimal*.)

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

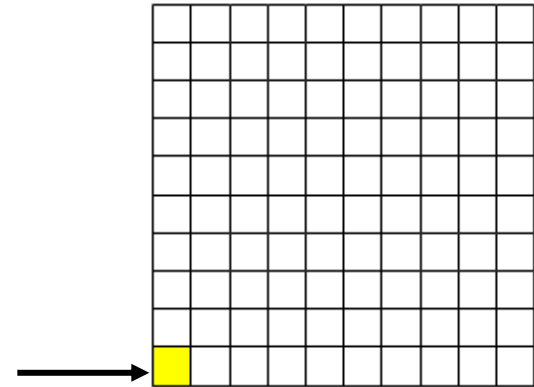


$$5 > 3$$

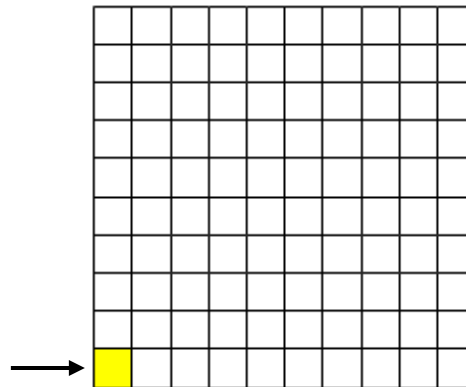
Greater than is used to compare two numbers when the first number is larger than the second number.

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

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



**Greater than
(or equal to)
denominator**

improper
fraction

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

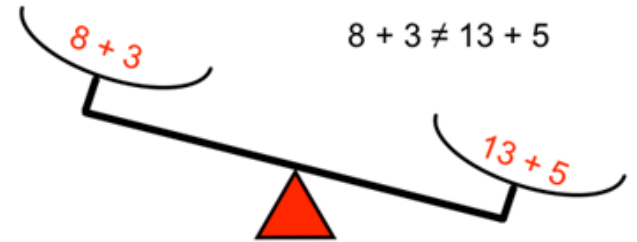


**Greater than
(or equal to)
denominator**

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

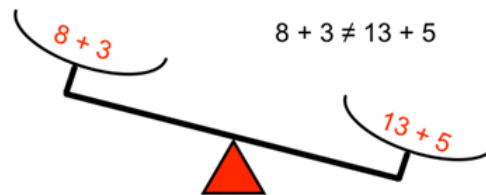
inequality

inequality



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

inequality

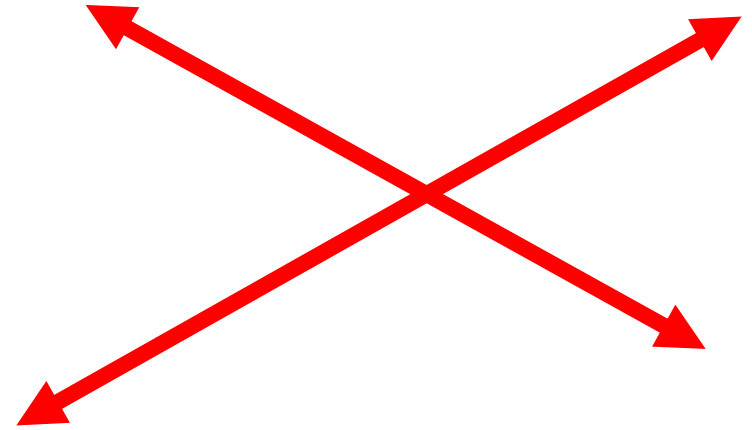


These expressions **do not** balance the scale because they are **not** equal.

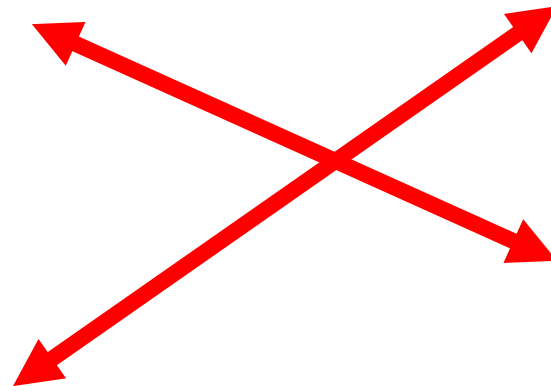
A mathematical sentence that compares two unequal expressions using one of the symbols $<$, $>$, or \neq . e.g. $26 > 13$; $13 < 26$; $2 + 4 < 6 + 3$

intersect

intersect



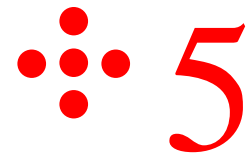
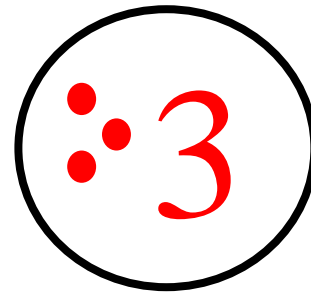
intersect



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

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

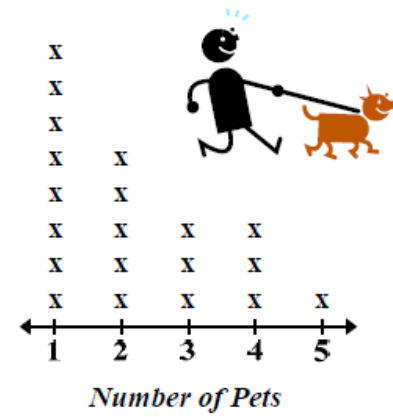
like
denominators

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

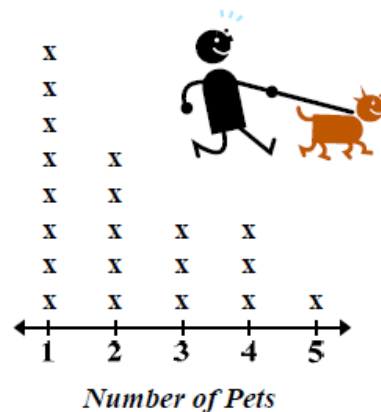
Denominators in two
or more fractions that are
the same.

line plot

line plot



line plot



A diagram showing frequency of data on a number line.

long division

long division

$$\begin{array}{r} 332 \text{ R } 0 \\ 23 \overline{)7636} \\ \underline{-69} \\ 73 \\ \underline{-69} \\ 46 \\ \underline{-46} \\ 0 \end{array}$$

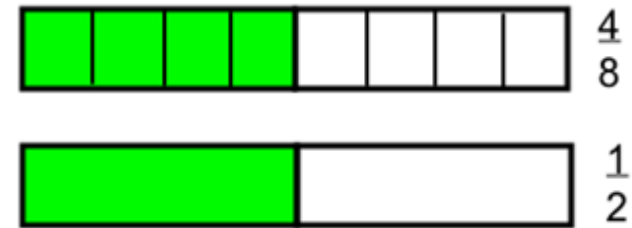
long division

$$\begin{array}{r} 332 \text{ R } 0 \\ 23 \overline{)7636} \\ \underline{-69} \\ 73 \\ \underline{-69} \\ 46 \\ \underline{-46} \\ 0 \end{array}$$

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

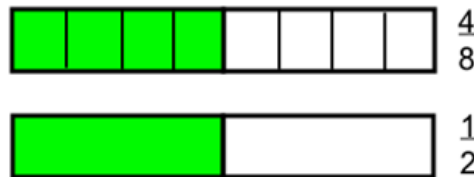
lowest terms

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.

