

English 4th Grade M-Z

Vocabulary Cards and Word Walls

Revised: June 3, 2013

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

Oxford Illustrated Math Dictionary, 2012. ISBN: 978-0-19-407128-4

Student Reference Books, Everyday Mathematics, 2007.

Houghton-Mifflin eGlossary, <http://www.eduplace.com>

Interactive Math Dictionary, <http://www.amathsdictionaryforkids.com/>

mass

mass



mass



The amount of matter in an object. Usually measured by comparing with an object of known mass. While gravity influences weight, it does not affect mass.

meter (m)

meter (m)



A baseball bat is *about* 1 meter long.

meter (m)

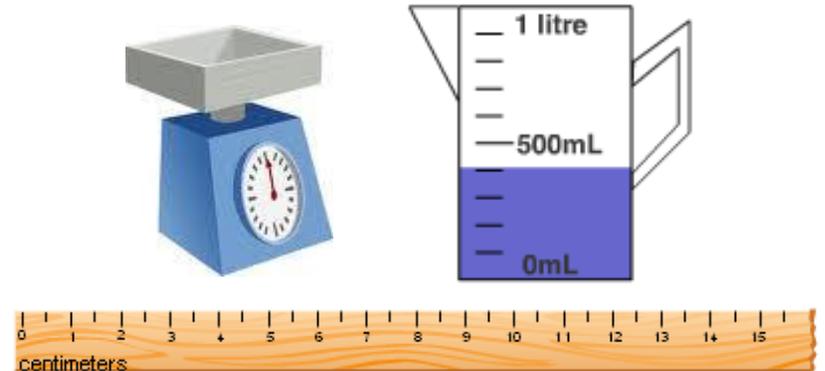


A standard unit
of length in the
metric system.

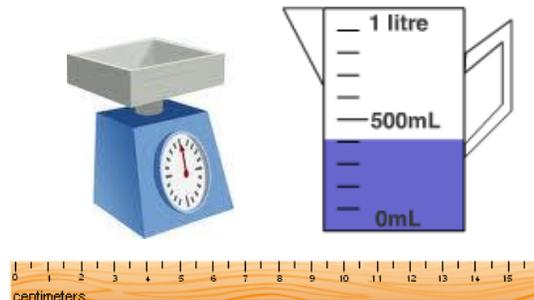
A baseball bat is *about* 1 meter long.

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.

mile

mile



Two times around the average roller coaster is *about* 1 mile.

mile



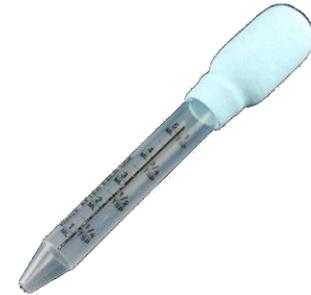
Two times around the average roller coaster is *about* 1 mile.

A customary unit
of length.
1 mile = 5,280 feet

milliliter (mL)

This holds about 10 drops or 1 milliliter.

milliliter (mL)



This holds about 10 drops or 1 milliliter.

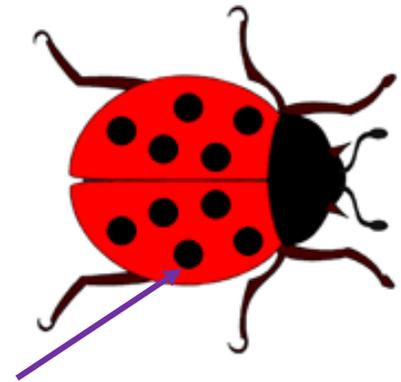
milliliter (mL)



A metric unit of capacity.
1,000 milliliters = 1 liter

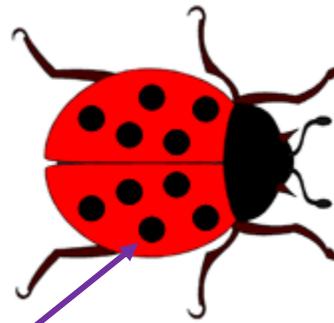
millimeter (mm)

millimeter (mm)



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

millimeter (mm)



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

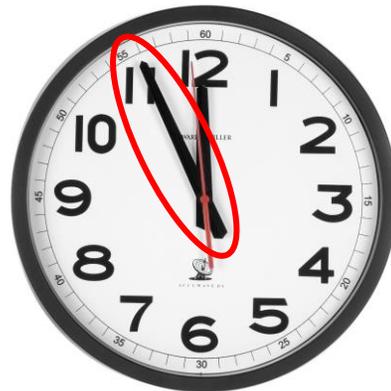
A metric unit of length.
1,000 millimeters = 1 meter

minute (min)

minute (min)



minute (min)



A unit used to measure a short amount of time; there are 60 minutes in one hour.

mixed number

mixed
number

$$1\frac{5}{8}$$

$$4\frac{3}{4}$$

mixed
number

$$1\frac{5}{8}$$

$$4\frac{3}{4}$$

A number that has
a counting number
and a fraction.

month

month

September						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

September is the ninth month of the year.

month

September						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

September is the ninth month of the year.

A length of time equal to
28, 30, or 31 days.
12 months = 1 year

multiple

multiple

12 is a multiple
of **3** and **4**
because **3 x 4 = 12**

multiple

12 is a multiple
of **3** and **4**
because **3 x 4 = 12**

A product of a given
whole number
and any other
whole number.

multiplicative comparison

multiplicative comparison



Amy had 5 baseball cards. Jeff had 3 times as many cards as Amy. How many baseball cards did they have altogether?

multiplicative comparison



Amy had 5 baseball cards. Jeff had 3 times as many cards as Amy. How many baseball cards did they have altogether?

Compare by asking or telling how many times more one amount is than another. e.g., 3 times as many as

Multiplicative Identity Property of 1

Multiplicative
Identity
Property of 1



$$1 \text{ group of } 3 = 3$$
$$1 \times 3 = 3$$

Multiplicative
Identity
Property of 1

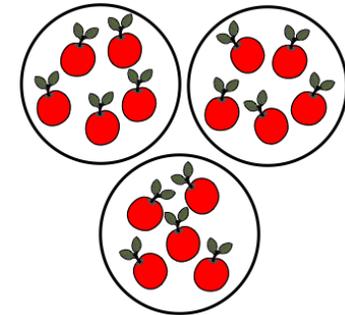


$$1 \text{ group of } 3 = 3$$
$$1 \times 3 = 3$$

If you multiply a number
by one, the product is the
same as that number.

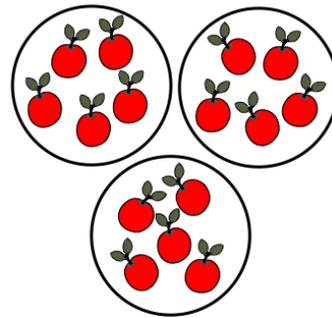
multiply

multiply



3×5 is the same as $5 + 5 + 5$

multiply

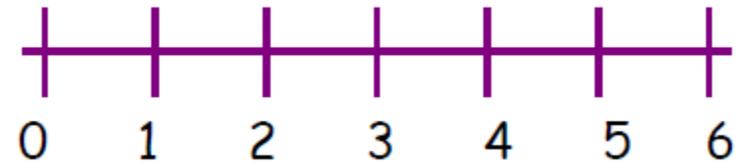


$$3 \times 5 = 5 + 5 + 5$$

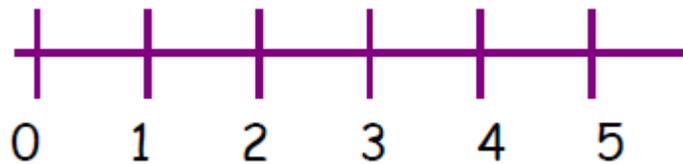
The operation of repeated addition of the same number.

number line

number line



number
line



A diagram that
represents numbers as
points on a line.

number names

number
names

The number name for
234
is two hundred,
thirty-four.

number
names

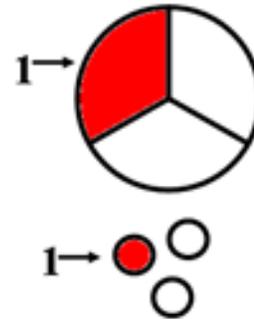
The number name for
234
is two hundred,
thirty-four.

A way of using words to
write a number.
(also known as word form)

numerator

numerator

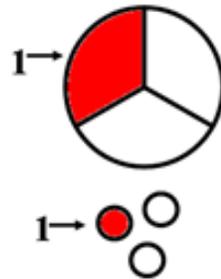
$$\frac{1}{3}$$



- Parts shaded
- Parts we are using

numerator

$$\frac{1}{3}$$

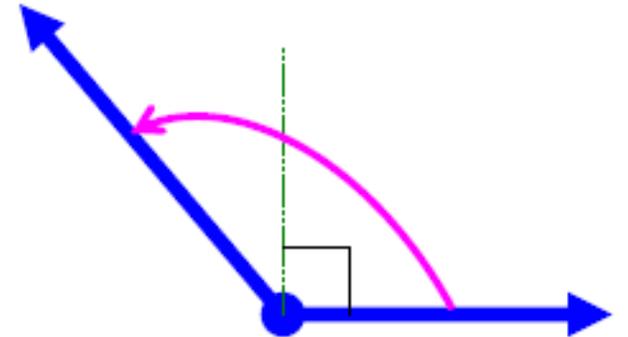


- Parts shaded
- Parts we are using

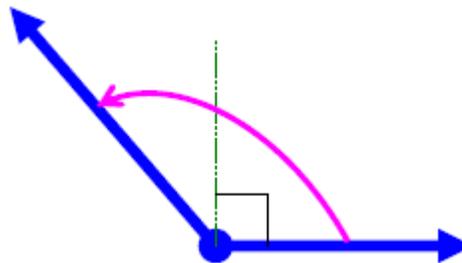
The number written above the line in a fraction. It tells how many equal parts are described in the fraction.

obtuse angle

obtuse angle



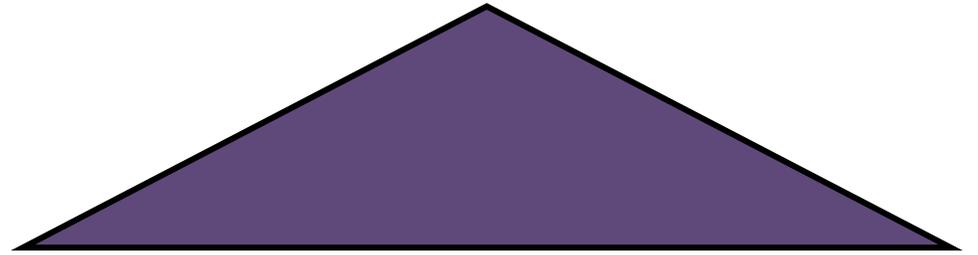
obtuse angle



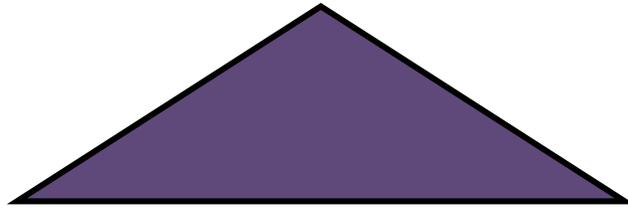
An angle with a measure
greater than 90°
but less than 180° .

obtuse triangle

obtuse
triangle



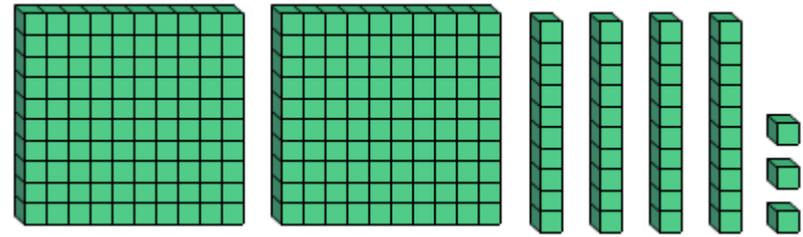
obtuse
triangle



A triangle that contains one angle with a measure greater than 90° (obtuse angle) and two acute angles.

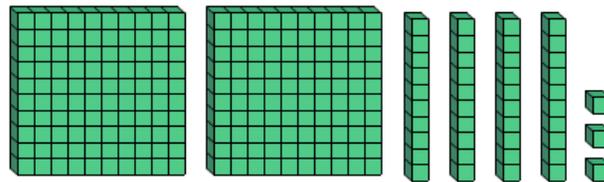
ones

ones



Hundreds	Tens	Ones
2	4	3

ones



Hundreds	Tens	Ones
2	4	3

The value of a digit that is farthest to the right when describing whole number place value.

order

order

$$\frac{2}{8} \quad \frac{2}{6} \quad \frac{2}{4}$$

In order from least to greatest.

order

$$\frac{2}{8} \quad \frac{2}{6} \quad \frac{2}{4}$$

In order from least to greatest.

A sequence or arrangement of things.
To order fractions, compare two fractions at a time.

Order of Operations

Order of Operations

Order of Operations

1. Do operations in parentheses.
 2. Multiply and divide in order from left to right.
 3. Add and subtract in order from left to right.
- 

Order of Operations

Order of Operations

1. Do operations in parentheses.
 2. Multiply and divide in order from left to right.
 3. Add and subtract in order from left to right.
- 

A set of rules that tells the order in which to compute.

ounce (oz)

ounce (oz)



A strawberry weighs about 1 ounce.

ounce (oz)



A strawberry weighs about 1 ounce.

A customary unit of weight equal to one sixteenth of a pound.
16 ounces = 1 pound

p.m.

p.m.



12:00 P.M.
noon

3:30 P.M.
half past 3

7:45 P.M.
a quarter to 8

12:00 A.M.
12 midnight



12:00 P.M.
noon

3:30 P.M.
half past 3

7:45 P.M.
a quarter to 8

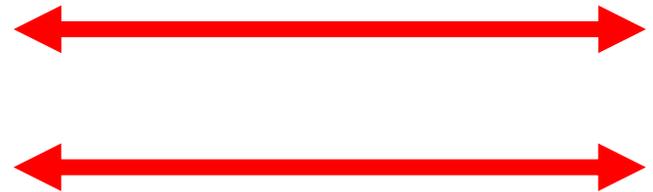
12:00 A.M.
12 midnight

p.m.

The time between
12:00 noon and
12:00 midnight.

parallel lines

parallel lines



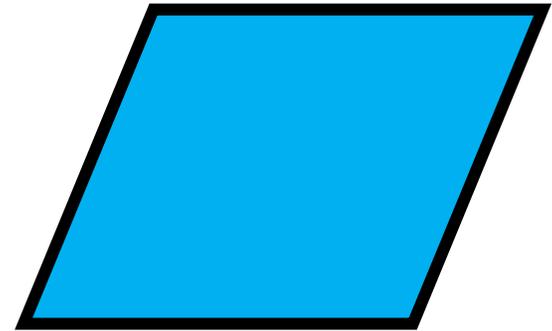
parallel
lines



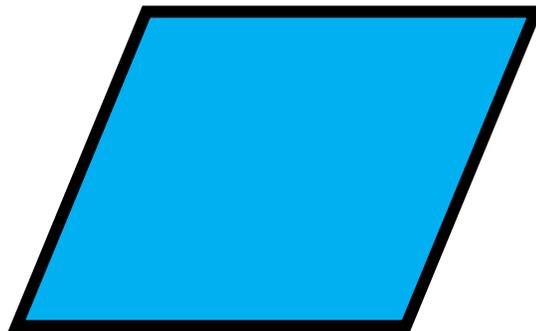
Lines that are always
the same distance apart.
They do not intersect.

parallelogram

parallelogram



parallelogram



A quadrilateral
with two pairs of
parallel and
congruent sides.

parentheses

parentheses

$$(2 + 3) \times 4$$

$$5 \times 4$$

$$20$$

parentheses

$$(2 + 3) \times 4$$

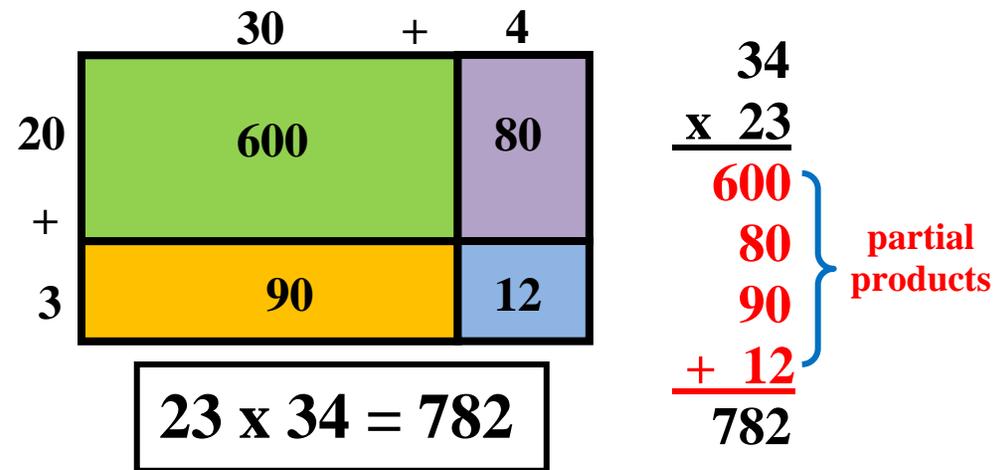
$$5 \times 4$$

$$20$$

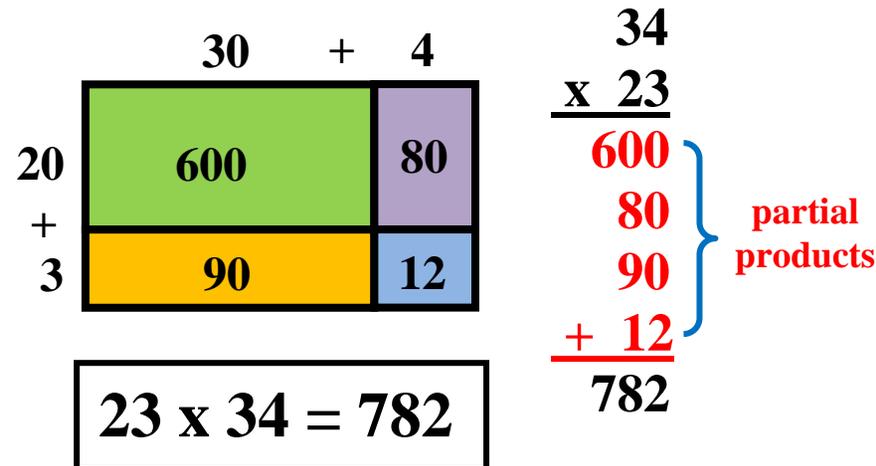
Used in mathematics as grouping symbols for operations. When simplifying an expression, the operations within the parentheses are performed first.

partial product

partial product



partial product



A method of multiplying in which the value of each digit in a factor is multiplied separately, and then the partial products are added together.

partial quotient

partial quotient

$$\begin{array}{r} 6 \overline{)152} \\ \underline{-120} \\ 32 \\ \underline{-30} \\ 2 \\ \uparrow \\ \text{Remainder} \end{array} \quad \left. \begin{array}{r} 20 \\ + 5 \\ \hline 25 \\ \uparrow \\ \text{Quotient} \end{array} \right\} \text{partial} \\ \text{quotients}$$

partial quotient

$$\begin{array}{r} 6 \overline{)152} \\ \underline{-120} \\ 32 \\ \underline{-30} \\ 2 \\ \uparrow \\ \text{Remainder} \end{array} \quad \left. \begin{array}{r} 20 \\ + 5 \\ \hline 25 \\ \uparrow \\ \text{Quotient} \end{array} \right\} \text{partial} \\ \text{quotients}$$

A method of dividing in which multiples of the divisor are subtracted from the dividend, and then the partial quotients are added together.

pattern

pattern

$$\underline{1} + 4 \quad \underline{5} + 4 \quad \underline{9} + 4 \quad \underline{13}$$

The pattern is all odd numbers.
It follows the rule “add 4.”

pattern

$$\underline{1} + 4 \quad \underline{5} + 4 \quad \underline{9} + 4 \quad \underline{13}$$

The pattern is all odd numbers.
It follows the rule “add 4.”

A repeating or growing sequence.
An ordered set of numbers arranged according to a rule.

pattern

pattern



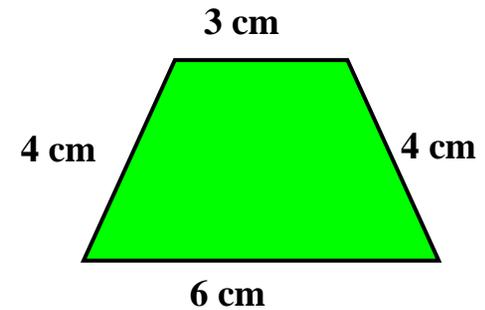
pattern



A repeating or growing sequence or design. An ordered set of numbers or shapes arranged according to a rule.

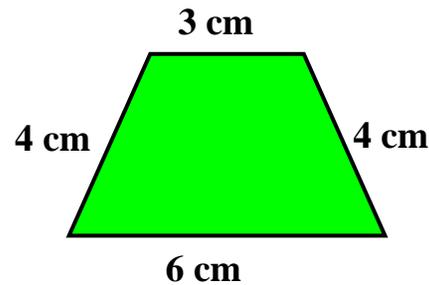
perimeter

perimeter



$$\begin{aligned}\text{Perimeter} &= 4\text{cm} + 6\text{cm} + 4\text{cm} + 3\text{cm} \\ &= 17\text{cm}\end{aligned}$$

perimeter

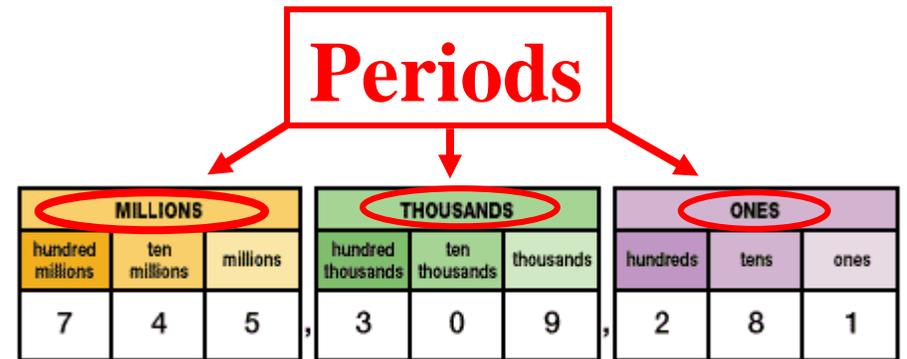


$$\begin{aligned}\text{Perimeter} &= 4\text{cm} + 6\text{cm} + 4\text{cm} + 3\text{cm} \\ &= 17\text{cm}\end{aligned}$$

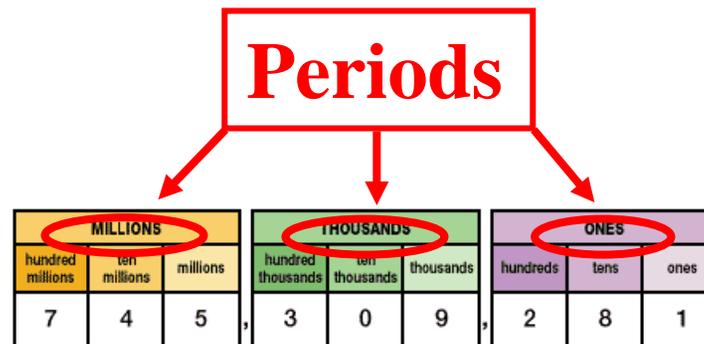
The distance
around the outside
of a figure.

period

period



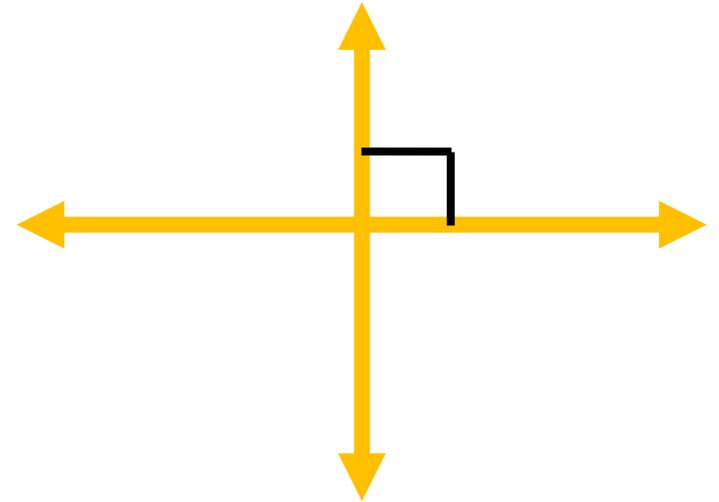
period



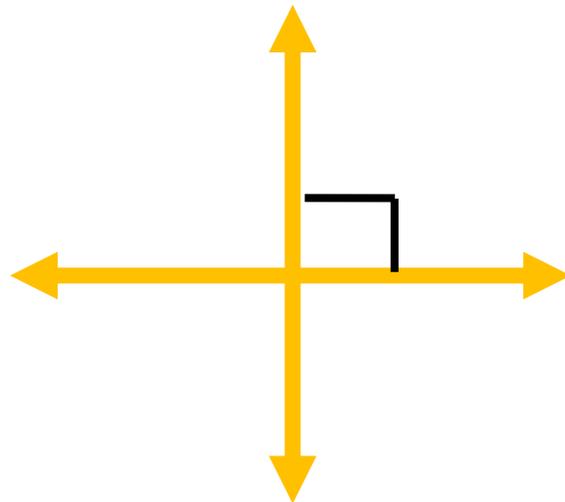
In a large number, periods are groups of 3 digits separated by commas or by spaces.

perpendicular lines

perpendicular lines



perpendicular
lines



Two intersecting lines
that form right angles.

pint (pt)

pint (pt)



The orange
juice carton
holds 1 pint.

pint (pt)



The orange
juice carton
holds 1 pint.

A customary unit of
capacity.
1 pint = 2 cups

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

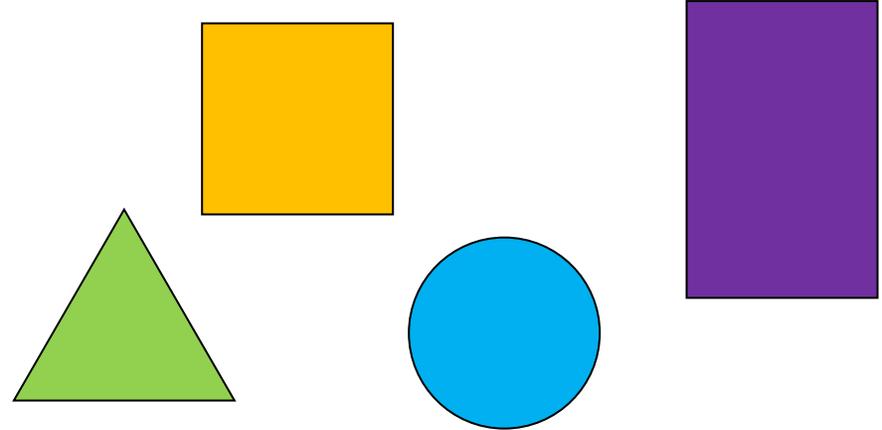
place value

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

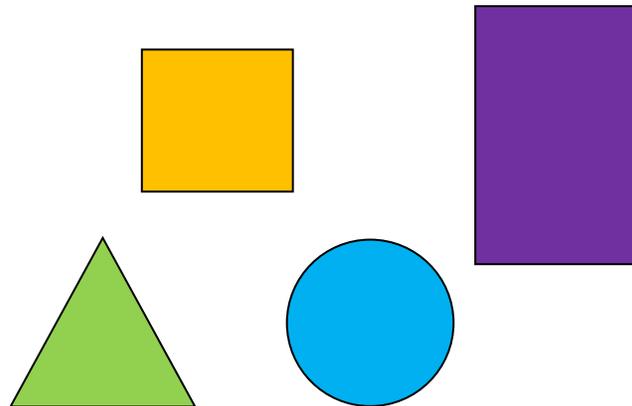
The value of the place of a digit in a number.

plane figure

plane
figure



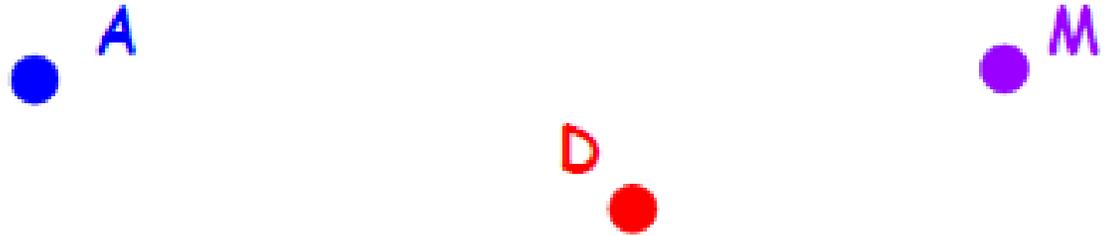
plane
figure



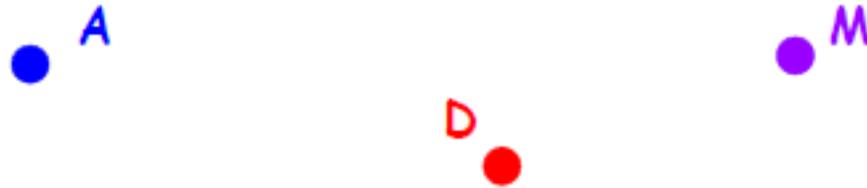
A two-dimensional figure.

point

point



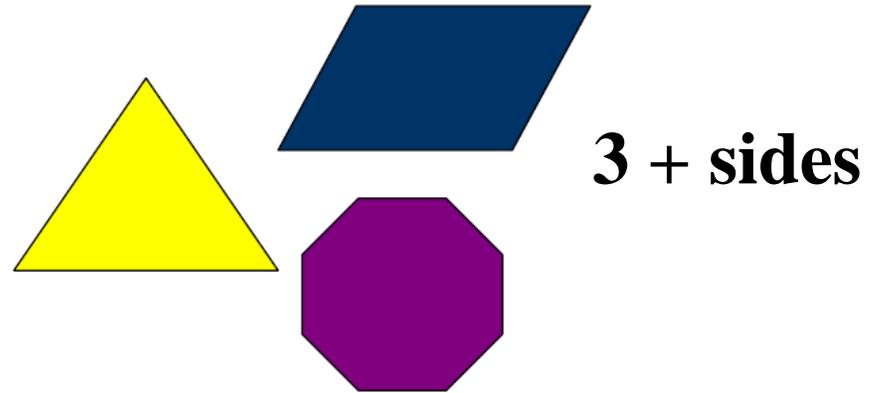
point



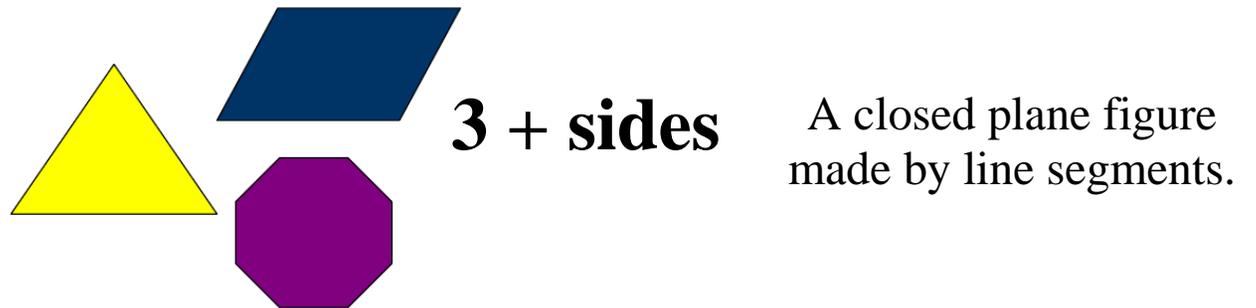
The exact location in space
represented by a dot.

polygon

polygon



polygon



pound (lb)

pound (lb)



A loaf of bread weighs *about* 1 pound.

pound (lb)

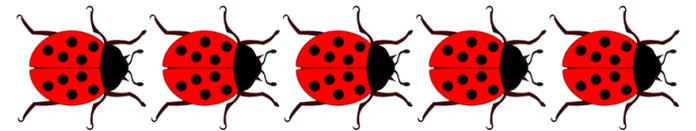


A loaf of bread weighs *about* 1 pound.

A customary unit
of weight.
1 pound = 16 ounces

prime number

prime
number



$$1 \times 5 = 5$$

5 is a prime number

prime
number



$$1 \times 5 = 5$$

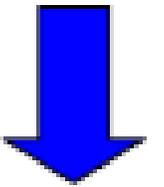
5 is a prime number

A whole number greater than 0 that has exactly two different factors, 1 and itself.

product

product

$$5 \times 3 = 15$$



product

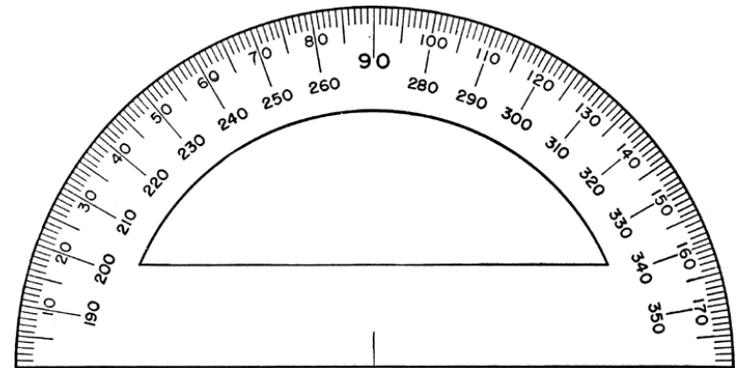
$$5 \times 3 = 15$$



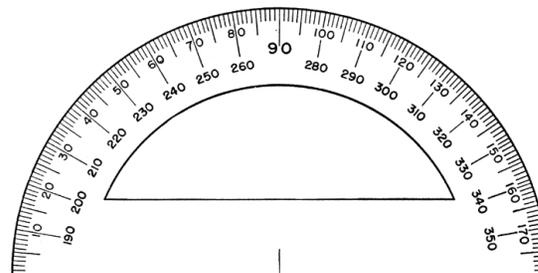
The answer to a
multiplication
problem.

protractor

protractor



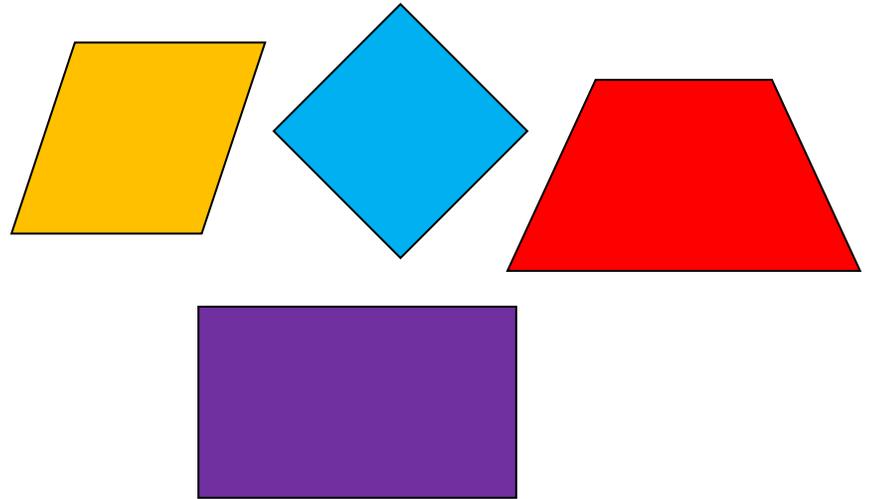
protractor



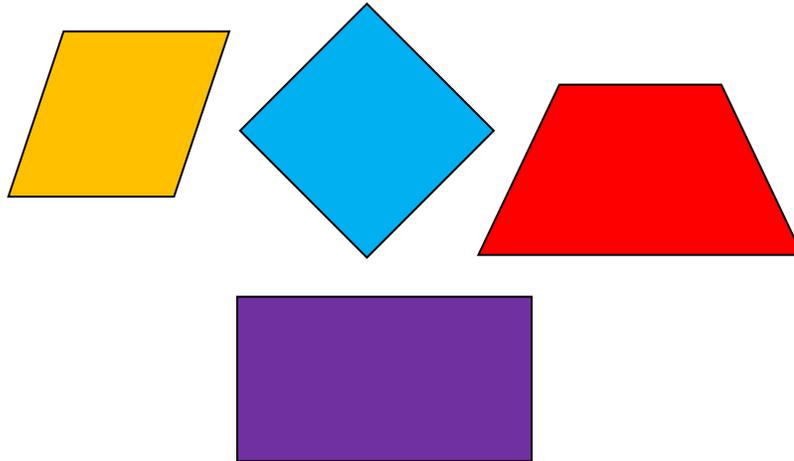
A tool used to measure and draw angles.

quadrilateral

quadrilateral



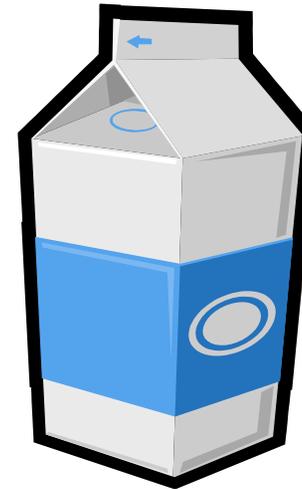
quadrilateral



A polygon with
four sides.

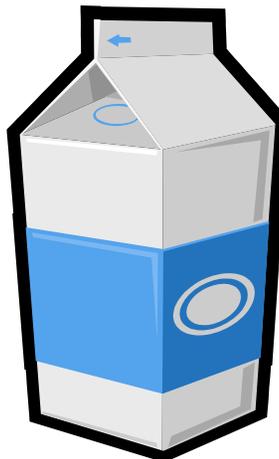
quart (qt)

quart (qt)



The milk carton holds 1 quart.

quart (qt)



The milk carton holds 1 quart.

A customary unit of capacity.

1 quart = 2 pints
or

1 quart = 4 cups

quotient

quotient

$$7 \overline{) 56} \quad \text{8}$$

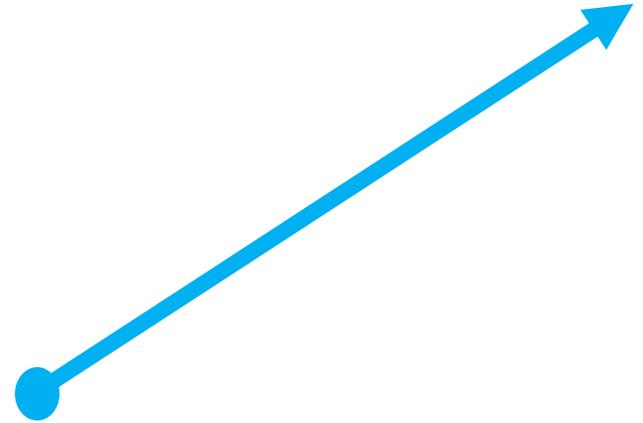
quotient

$$7 \overline{) 56} \quad \text{8}$$

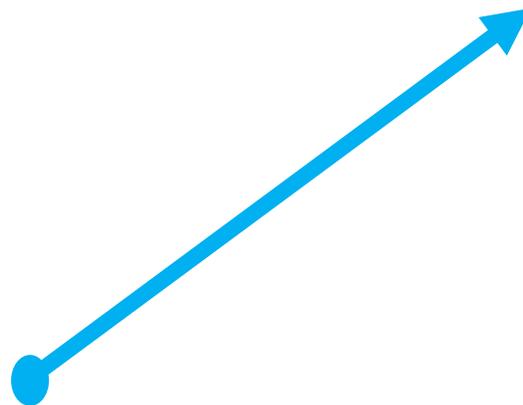
The answer to a
division problem.

ray

ray



ray



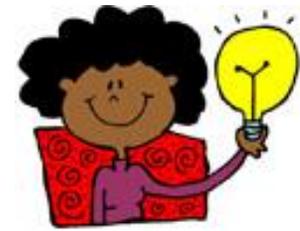
A part of a line that has one endpoint and goes on forever in one direction.

reasonableness

reasonableness

What is the product of 57 and 34?

- A. 1,938 C. 5,738
B. 3,208 D. 8,698



Use estimation to eliminate unreasonable choices.

$$60 \times 30 = 1,800$$

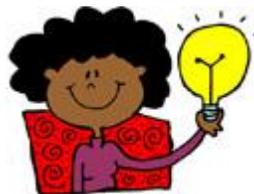
B, C, and D are not close to 1,800.

The answer is A.

reasonableness

What is the product of 57 and 34?

- A. 1,938 C. 5,738
B. 3,208 D. 8,698



Use estimation to eliminate unreasonable choices.

$$60 \times 30 = 1,800$$

B, C, and D are not close to 1,800.

The answer is A.

An answer that is based on good number sense.

rectangle

rectangle



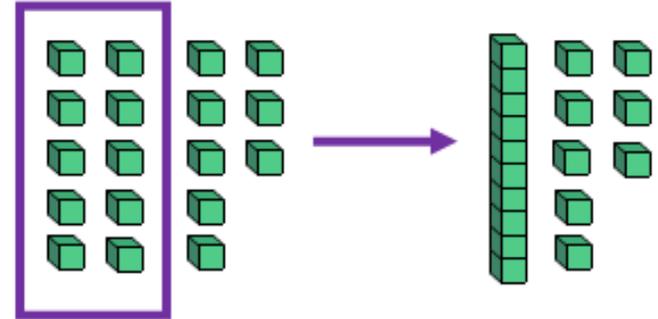
rectangle



A quadrilateral with two pairs of congruent, parallel sides and four equal angles.

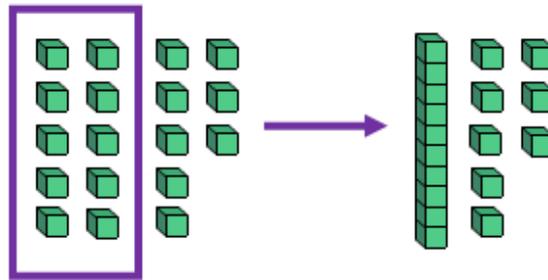
regroup

regroup



Regroup 18 ones as 1 ten and 8 ones.

regroup

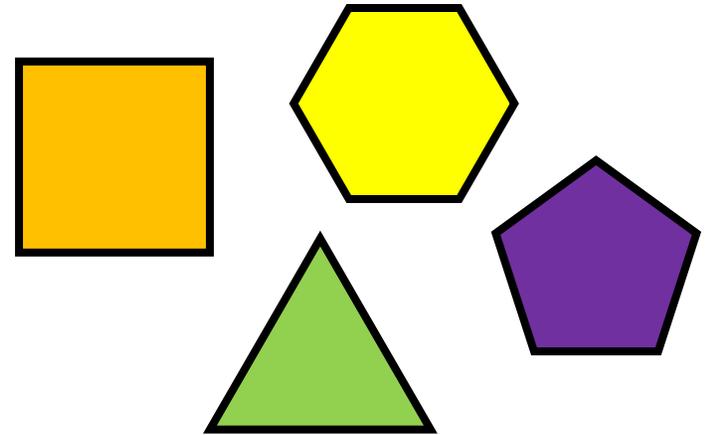


Regroup 18 ones as 1 ten and 8 ones.

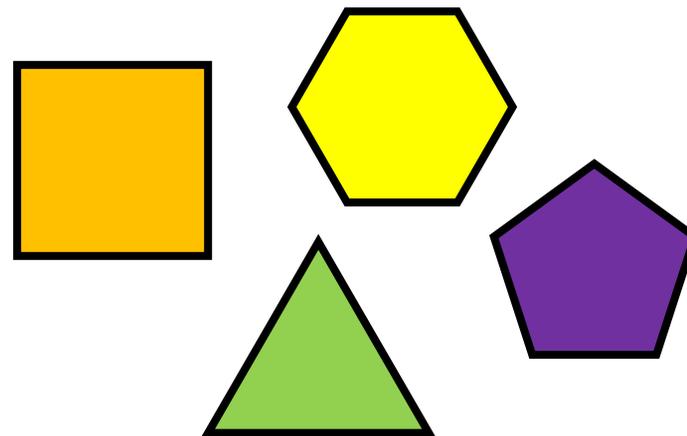
To rearrange the formation of a group.

regular polygon

regular
polygon



regular
polygon



A polygon with all sides the
same length and all angles
the same measure.

related facts

related facts

Related Facts for 3, 5, 8

$3 + 5 = 8 \quad 8 - 5 = 3$

$5 + 3 = 8 \quad 8 - 3 = 5$

related facts

Related Facts for 3, 5, 8

$3 + 5 = 8 \quad 8 - 5 = 3$

$5 + 3 = 8 \quad 8 - 3 = 5$

Related addition and subtraction facts or related multiplication and division facts.
(also known as fact family)

remainder

There are 32 students going on a field trip.
Each chaperone can supervise 5 students.
How many chaperones are needed?

remainder

$$32 \div 5 = 6 \text{ r}2$$

7 chaperones are needed.

There are 32 students going on
a field trip. Each chaperone
can supervise 5 students.
How many chaperones are needed?

remainder

$$32 \div 5 = 6 \text{ r}2$$

The amount left
over when one
number is divided
by another.

7 chaperones are needed.

repeated subtraction

repeated subtraction

$$\begin{array}{r} 12 - 4 = 8 \\ 8 - 4 = 4 \\ 4 - 4 = 0 \end{array}$$

I can subtract
3 equal groups
of 4 from 12.



repeated subtraction

$$\begin{array}{r} 12 - 4 = 8 \\ 8 - 4 = 4 \\ 4 - 4 = 0 \end{array}$$

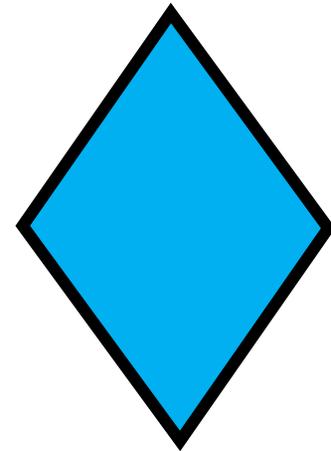
I can subtract
3 equal groups
of 4 from 12.



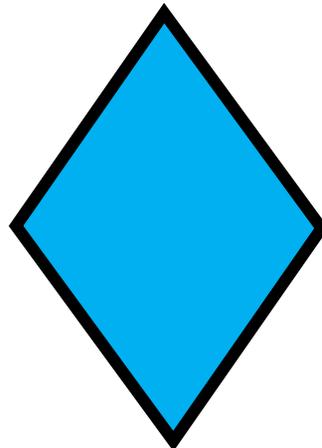
Subtracting equal
groups to find the
total amount
of groups.

rhombus

rhombus



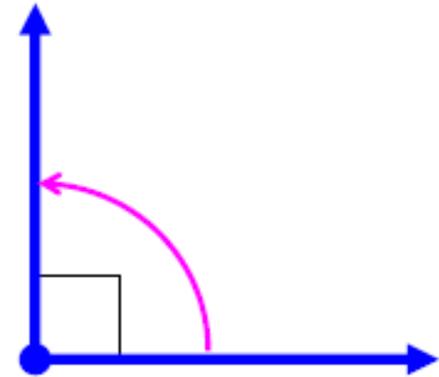
rhombus



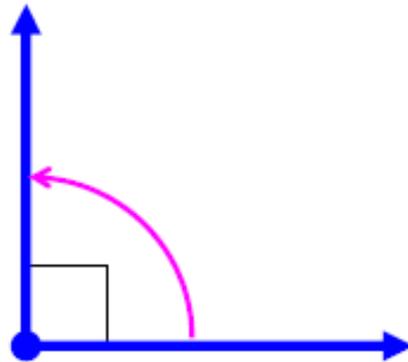
A quadrilateral with
all four sides
equal in length.

right angle

right angle



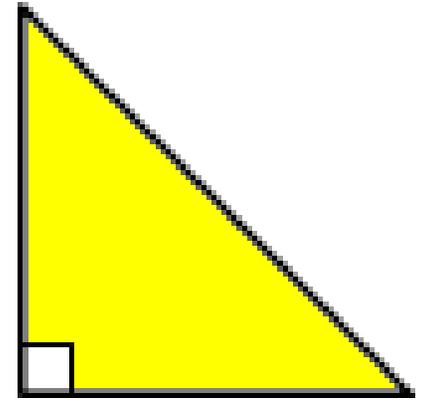
right angle



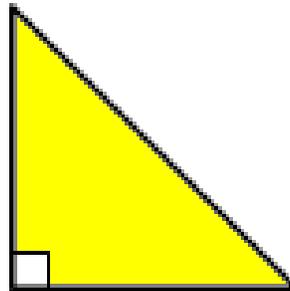
An angle that measures
exactly 90° .

right triangle

right
triangle



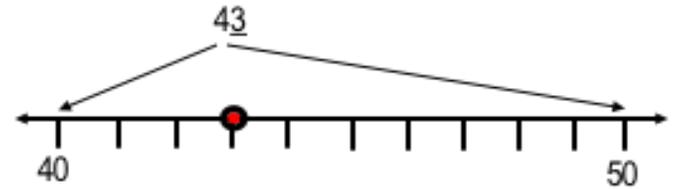
right
triangle



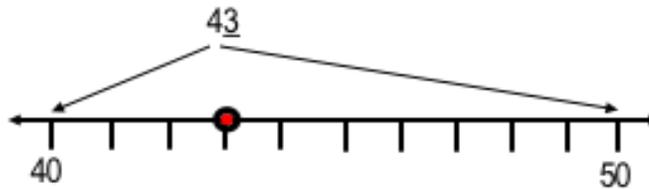
A triangle that has
one 90° angle.

round a whole number

round a
whole number



round a whole
number



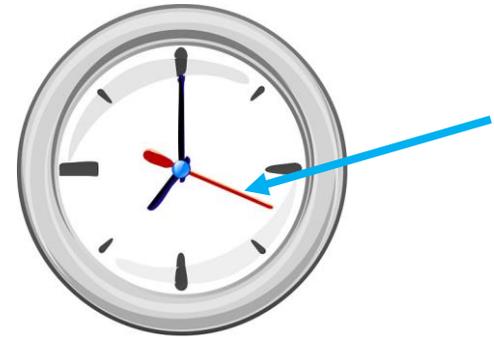
To find the nearest ten,
hundred, thousand,
(and so on).

second (sec)

(unit of time)

second (sec)

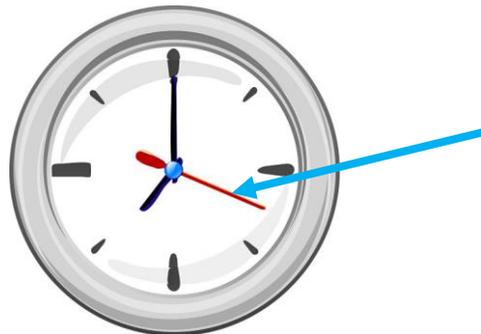
(unit of time)



60 seconds = 1 minute

second (sec)

(unit of time)



60 seconds = 1 minute

A unit used to measure a very short amount of time; there are 60 seconds in one minute.

sequence

sequence

2, 5, 8, 11, 14, 17...

sequence

2, 5, 8, 11, 14, 17...

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

simplest form

simplest
form



$\frac{4}{8}$ in simplest form is $\frac{1}{2}$.

simplest
form

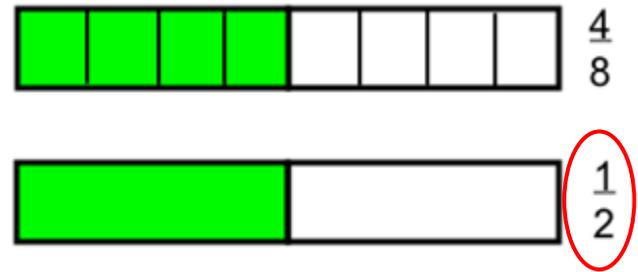


$\frac{4}{8}$ in simplest form is $\frac{1}{2}$.

When a fraction is expressed with the fewest possible pieces, it is in simplest form. (also known as lowest terms)

simplify

simplify



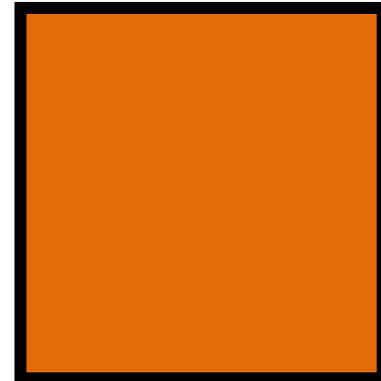
simplify



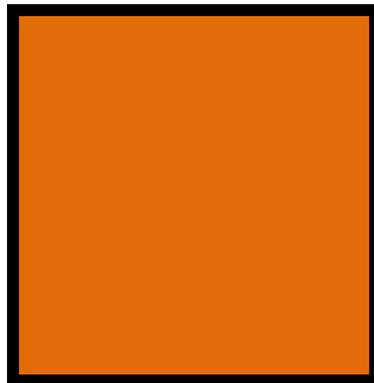
To express a fraction
in simplest form.

square

square



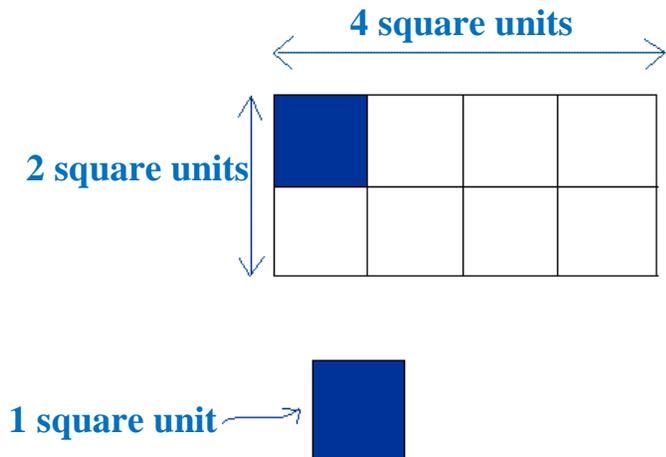
square



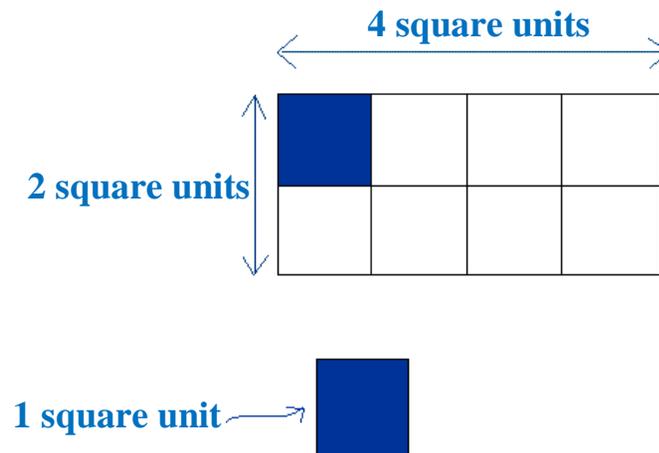
A parallelogram with
four equal angles AND
four equal sides.

square unit

square
unit



square
unit



A unit, such as square centimeter or square inch, used to measure area.

standard form

standard
form

12,345

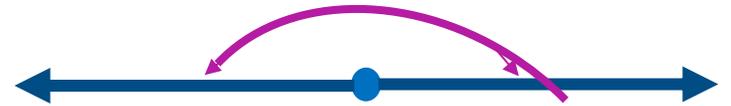
standard
form

12,345

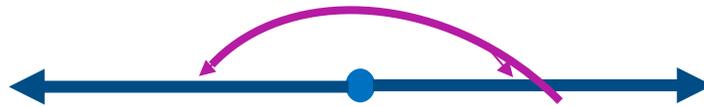
A common or usual way of writing a number using digits. (also known as base-ten numeral form)

straight angle

straight
angle



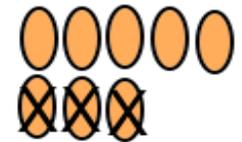
straight
angle



An angle that measures
exactly 180° .

subtract

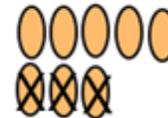
subtract



$$8 - 3 = 5$$

$$8 - 3 = 5$$

subtract



$$8 - 3 = 5$$

$$8 - 3 = 5$$

An operation that gives the difference between two numbers. Subtraction can be used to compare two numbers, or to find out how much is left after some is taken away.

sum

sum

$$453 + 929 = 1,382$$

sum



sum

$$453 + 929 = 1,382$$

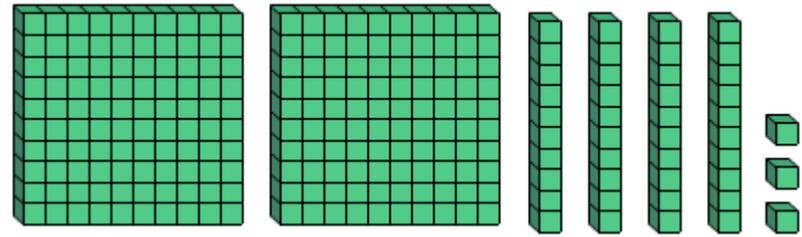
sum



The answer to an
addition problem.

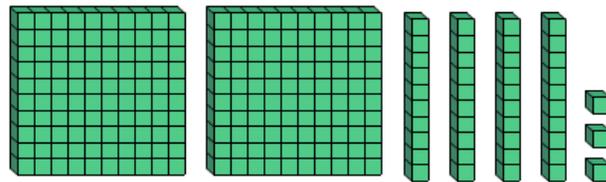
tens

tens



Hundreds	Tens	Ones
2	4	3

tens

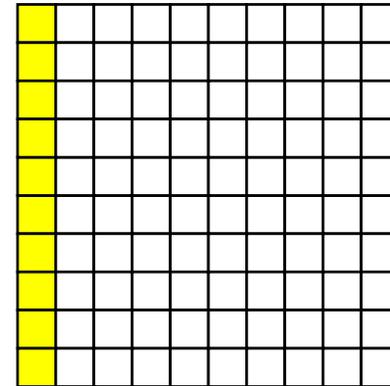


Hundreds	Tens	Ones
2	4	3

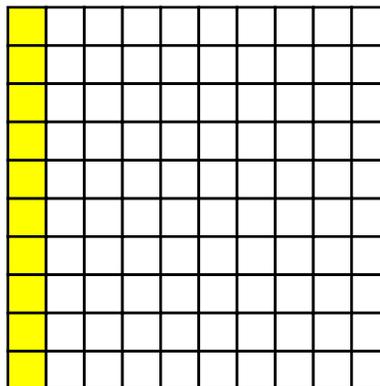
The value of a digit that is the second position from the right when describing whole number place value.

tenth

tenth



tenth



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

tenths

tenths

4.3

tenths

4.3

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

term

term

3, 5, 7, 9...

terms

term

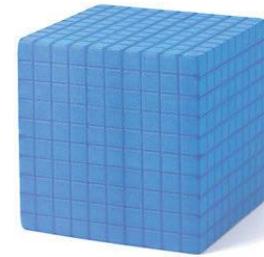
3, 5, 7, 9...

terms

A component of
a sequence.
A term in a sequence
is any number
in that sequence.

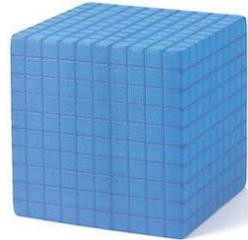
thousands

thousands



Thousands	Hundreds	Tens	Ones
1	0	0	0

thousands



Thousands	Hundreds	Tens	Ones
1	0	0	0

The value of a digit that is the fourth position from the right when describing whole number place value.

time interval

time
interval



time
interval



A duration of a
segment of time.
(also known as
elapsed time)

ton (T)

ton (T)



A small car weighs about 1 ton.

ton (T)



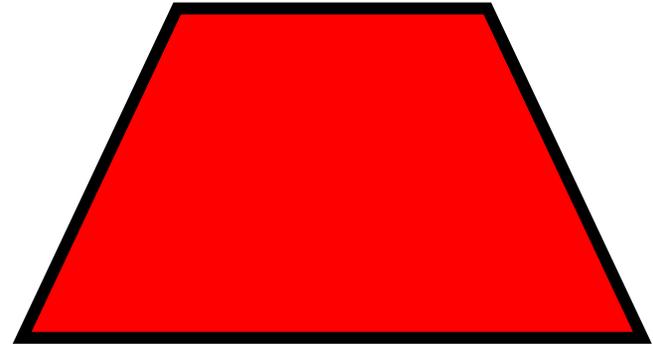
A small car weighs about 1 ton.

A customary unit of weight.
1 ton (T) = 2,000 pounds

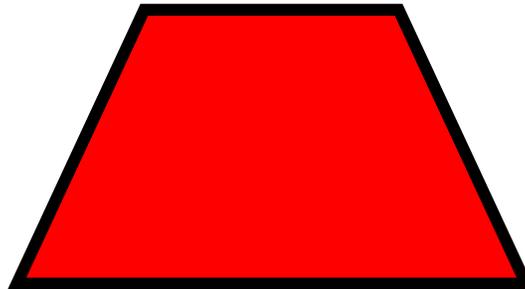
A metric ton (t) is a unit of mass equal to 1,000 kilograms (about 2,200 pounds).

trapezoid

trapezoid



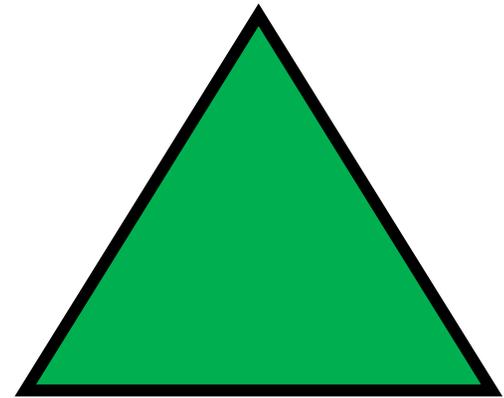
trapezoid



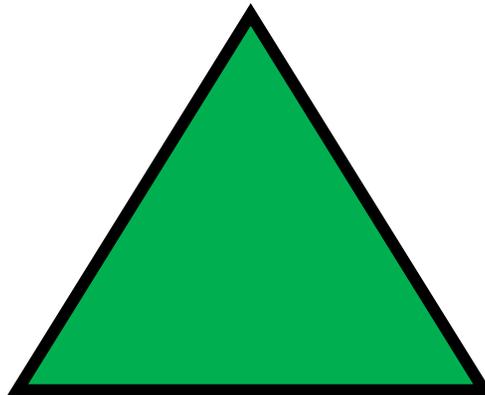
A quadrilateral with
one pair of parallel sides
and one pair of sides
that are not parallel.

triangle

triangle



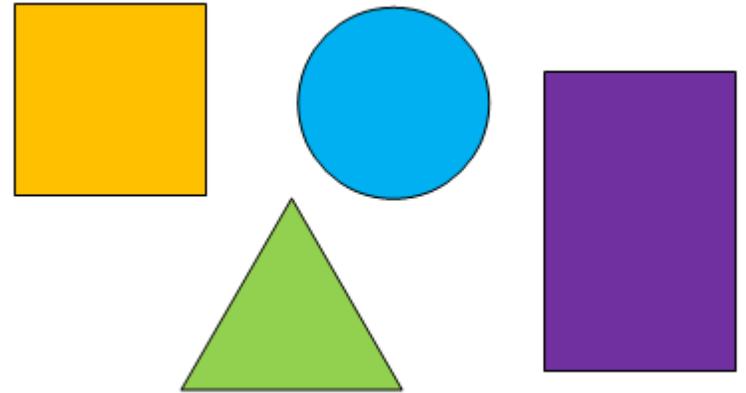
triangle



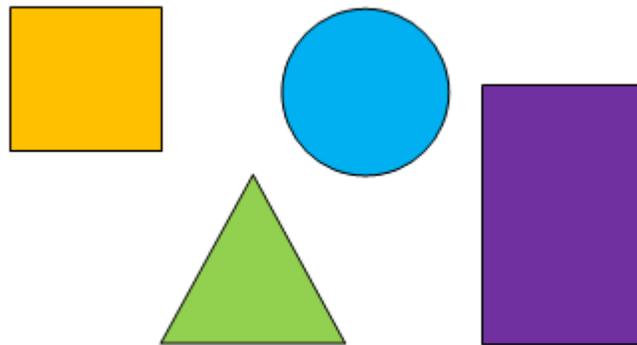
A polygon with
three sides and
three angles.

two-dimensional

two-dimensional



two-dimensional

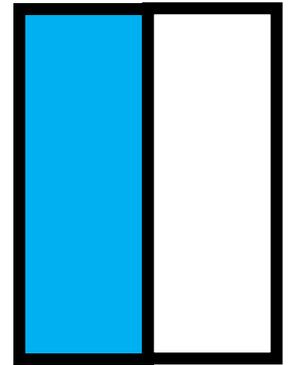


Having length and width. Having area, but not volume. (also known as a plane figure)

unit fraction

unit fraction

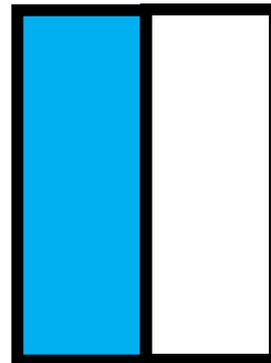
$$\frac{1}{2}$$



Example

unit
fraction

$$\frac{1}{2}$$



Example

A fraction that has
1 as its numerator.
A unit fraction
names 1 equal part
of a whole.

unlike denominators

unlike
denominators

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


unlike
denominators

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


Denominators that
are not equal.

unlike numerators

unlike
numerators

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

unlike
numerators

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

Numerators that
are not equal.

variable

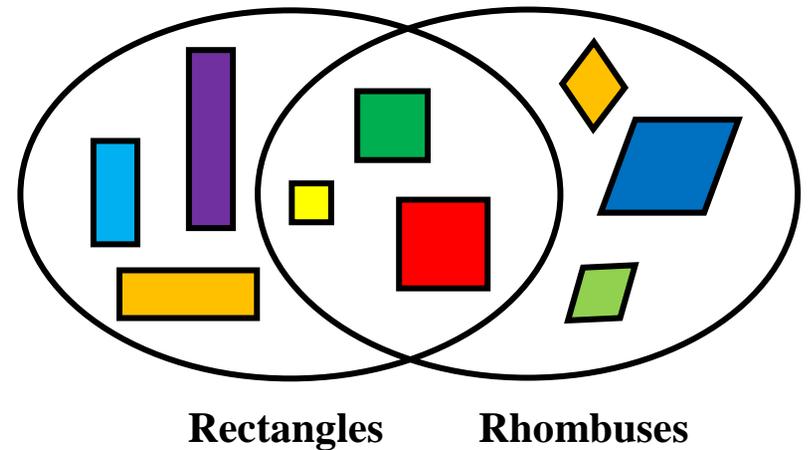
variable $5 \times b = 10$
b is a variable worth 2.

variable $5 \times b = 10$
b is a variable worth 2.

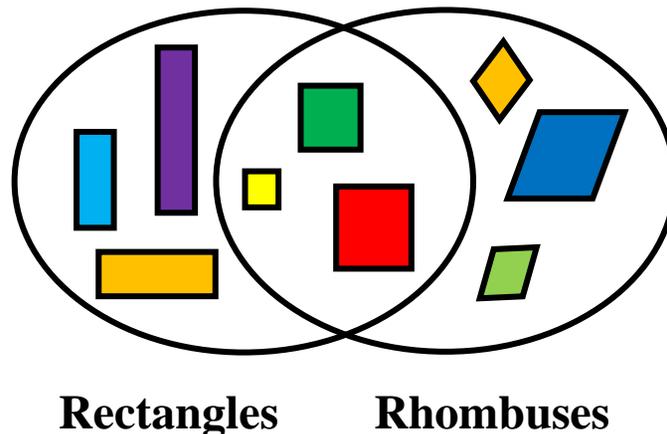
A letter or symbol that represents a number.

Venn diagram

Venn diagram



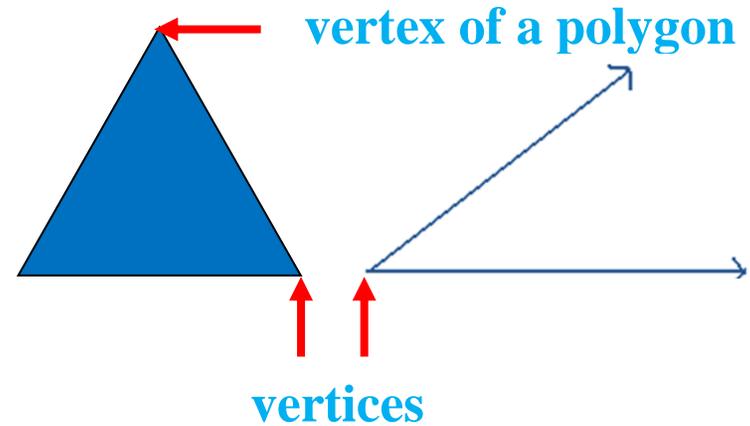
Venn diagram



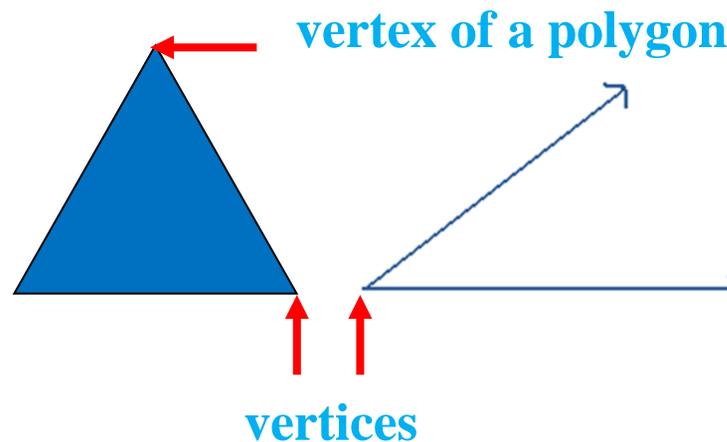
A drawing with circles or rings to show how sets of objects are related.

vertex

vertex



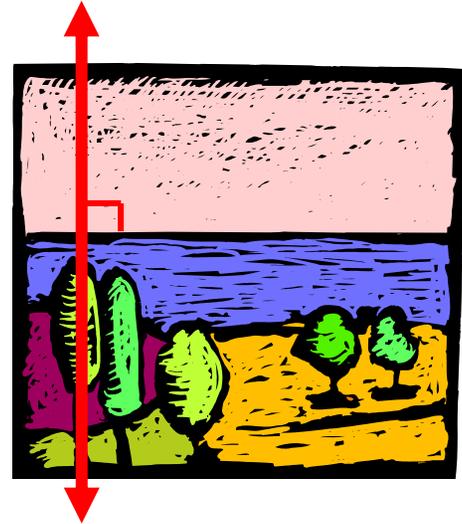
vertex



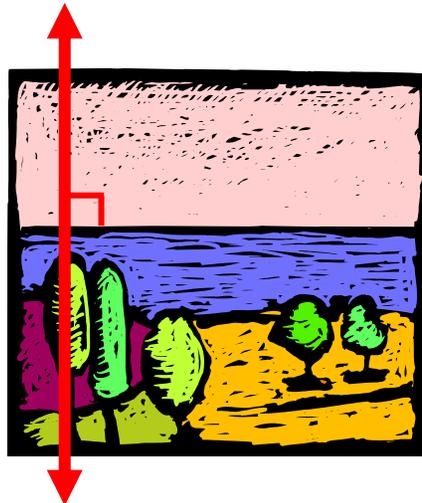
The point at which two line segments, lines, or rays meet to form an angle.
(plural - vertices)

vertical

vertical



vertical



Perpendicular to the horizon. Vertical lines go up and down.

volume (liquid)

volume (liquid)



liquid volume

volume (liquid)



liquid volume

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

week

week

September						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

7 days = 1 week

week

September						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

7 days = 1 week

There are seven days in a week: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

weight

weight



weight



The measure of how heavy something is.

whole

whole



1 whole pie



1 whole rectangle

whole



1 whole pie



1 whole rectangle

All of an object,
a group of objects,
shape, or quantity.

whole numbers

whole
numbers



whole
numbers



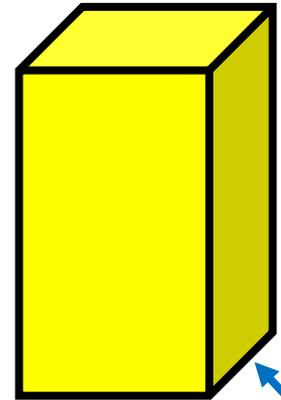
Whole numbers are
0 and the counting
numbers 1, 2, 3, 4, 5, 6,
and so on.

width (w)

width (w)



width

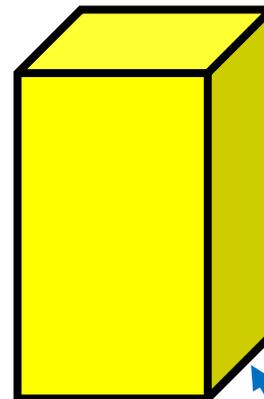


width

width (w)



width



width

One dimension of a
2-dimensional or
3-dimensional figure.

word form

word form

**The word form of
12,345
is twelve thousand,
three hundred
forty-five.**

**word
form**

**The word form of
12,345
is twelve thousand,
three hundred
forty-five.**

A way of using words to
write a number.

yard (yd)

yard (yd)



A door is *about* 1 yard wide.

yard (yd)

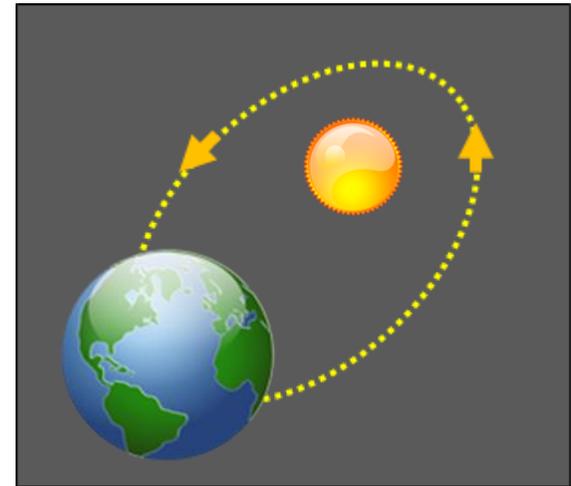


A door is *about* 1 yard wide.

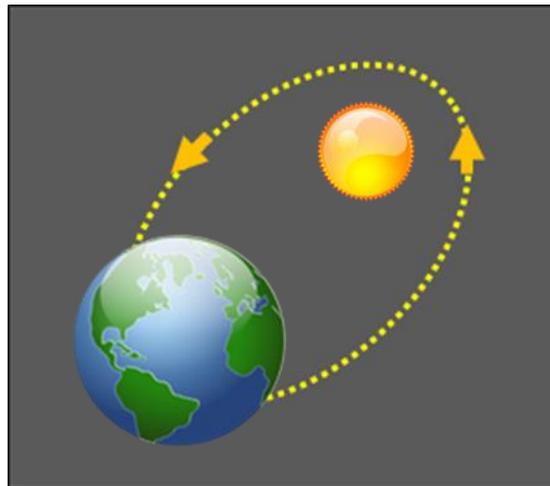
A customary unit of length.
1 yard = 3 feet or 36 inches

year

year



year



The length of time it takes
the Earth to revolve
around the sun.
12 months = 1 year
365 days = 1 year
366 days = 1 leap year

Zero Property of Multiplication

**Zero Property
of Multiplication**

$$8 \times 0 = 0$$

**Zero Property
of Multiplication**

$$8 \times 0 = 0$$

The product of
any number and
zero is zero.

