

**cardinal
numbers**

**ordinal
numbers**

**whole
numbers**

**decimal
point
2.5**

digit

**place
value**

— — • — —

are numbers that
indicate the order
"6th in line"

are counting numbers
that indicate the
quantity
"8 apples"

a number written with
a decimal point, and
falls between two #s
on the # line

the numbers in the
set $\{0, 1, 2, 3, 4, \dots\}$

the position of a
single digit in a whole
number or a decimal
number

a single number from
0 to 9 that occupies
one space

place value

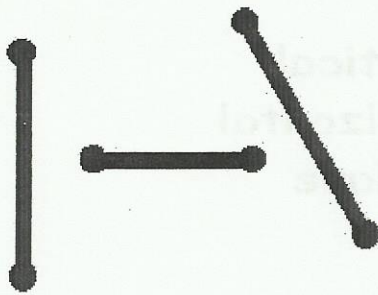
whole #s

—, — — •

place value

decimal #s

• — — —



\times \div

$+$ $-$

\swarrow 12

16 \nwarrow

• proper $\frac{2}{3}$

• improper $\frac{3}{2}$

• mixed $2\frac{2}{3}$

counting right from
the decimal point -
tenths, hundredths,
thousandths, and on
and on and on

counting left from
the decimal point -
ones, tens, hundreds,
thousands and on and
on and on

the four operations of
arithmetic

- vertical
- horizontal
- oblique

- proper fraction: the numerator is less than the denominator
- improper fraction: the numerator is greater than or equal to the denominator
- mixed #: made up of a whole # and a fraction

- fraction: part of a whole
- numerator: tells how many of the parts of a fraction are count
- denominator: tells the number of equal parts in the whole

$$62 - 29 =$$

estimate

$$60 - 30 =$$

divisible

$$8/4 = 2$$

=

reduce

$$\overline{18} = \frac{1}{2}$$

factor
(GCF)

multiple
(LCM)

able to be divided
into equal parts
without a remainder

get close to an exact
answer quickly by
rounding the numbers
before you do the work

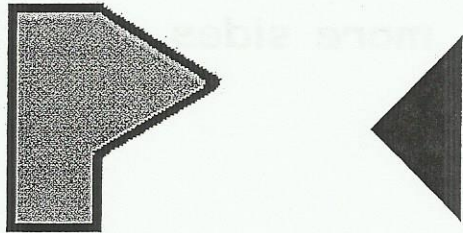
- to form an equivalent fraction with a smaller numerator and denominator
- also called "simplest form" or "lowest term"

of the same value

- multiple: the result of a number multiplied by any whole number
- least common multiple: the smallest number that is divisible by all factors in a given set

- factor: a number being multiplied
- greatest common factor: the biggest factor when a set of numbers is divisible by the same factor

polygon



triangle



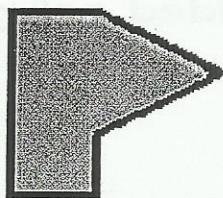
quadrilateral



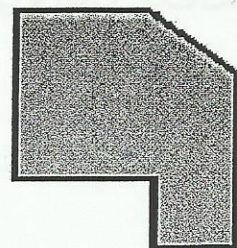
pentagon



hexagon



heptagon



a three sided polygon

a two dimensional
figure with three or
more sides

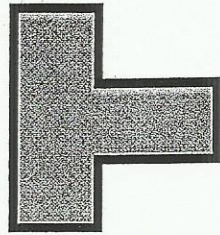
5-sided polygon

4-sided polygon

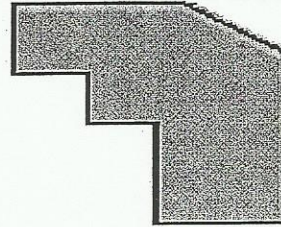
7-sided polygon

6-sided polygon

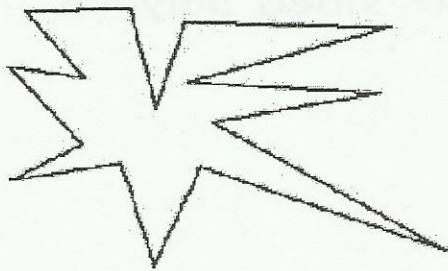
octagon



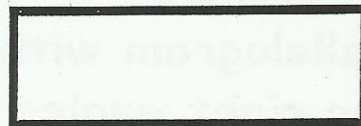
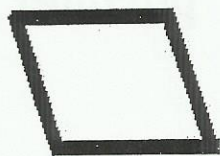
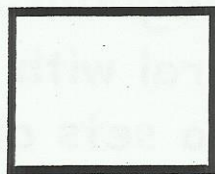
nonagon



decagon



plane
figures



9-sided polygon

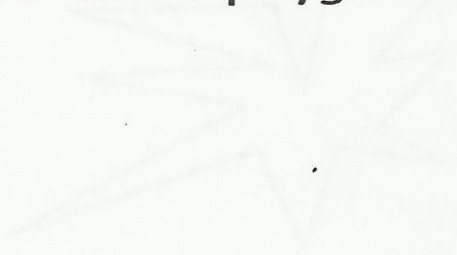


8-sided polygon



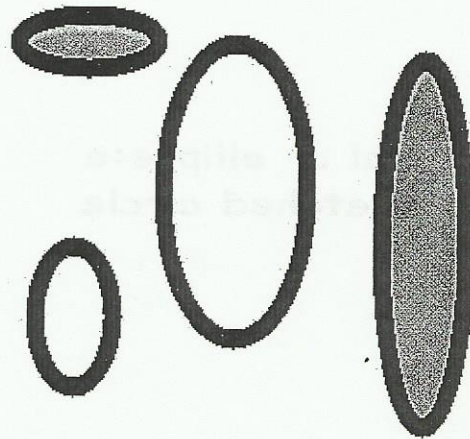
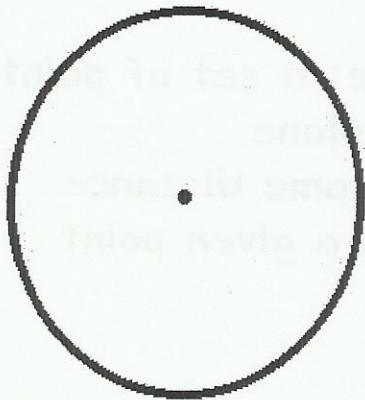
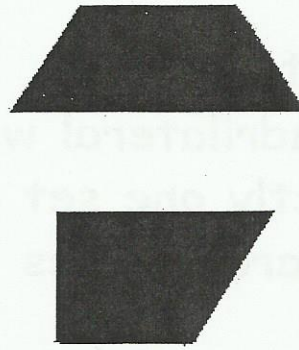
- shapes drawn on a flat surface
- 2-dimensional

10-sided polygon



rectangle: a
parallelogram with
four right angles

parallelogram: a
quadrilateral with at
least two sets of
parallel lines



rectangular prism



sphere



cone



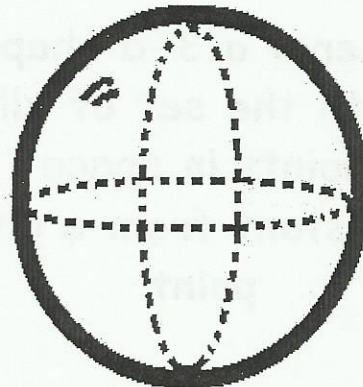
cylinder



pyramid



cube



trapezoid:
a quadrilateral with
exactly one set of
parallel lines

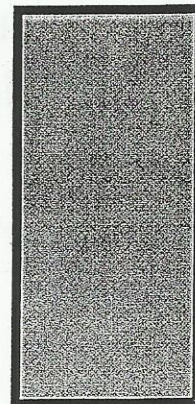
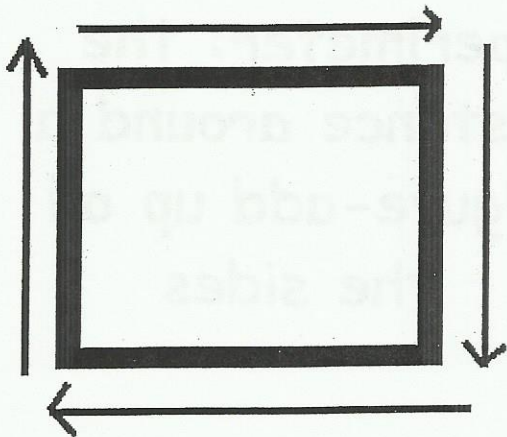
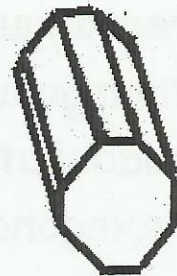
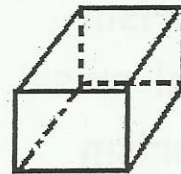
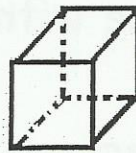
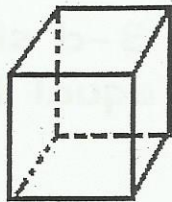
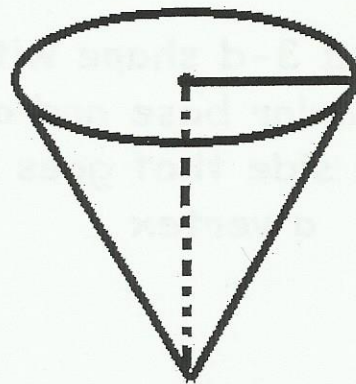
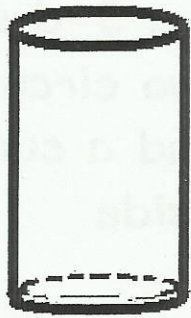
square: a
parallelogram with
four equal sides and
four right angles

oval or ellipse: a
stretched circle

- **circle:** a set of points
in a plane
- the same distance
from a given point

sphere: a 3-d shape
with the set of all
points in space
equidistant from a given
point

space figures:
3-dimensional
solid shapes



cone: a 3-d shape with a circular base and a curved side that goes to a vertex

cylinder: a 3-d shape with two circular bases and a curved side

prism: a 3-d shape with parallel bases and parallelogram faces

- rectangular prism
- triangular prism
- quadrilateral prism
- hexagonal prism

cube: a 3-d shape with six equal faces

- area: the amount of surface in a figure
- find how many square units on the surface

perimeter: the distance around a figure-add up all the sides

$$b \times h \text{ or} \\ l \times w$$

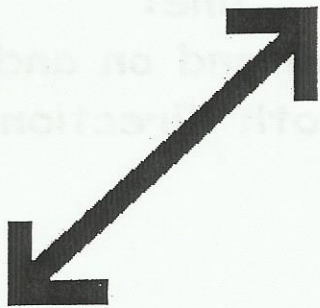
$$\frac{b \times h}{2}$$

positive numbers

{1, 2, 3...}

negative numbers

{-1, -2, ...}



the formula for
finding the area of a
triangle

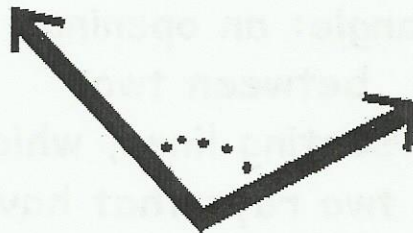
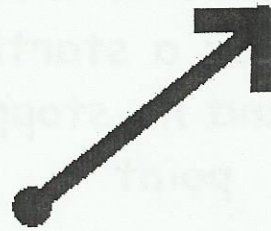
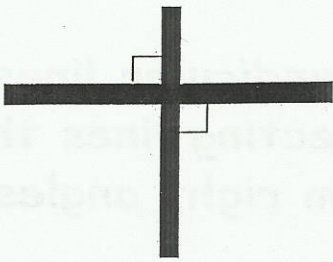
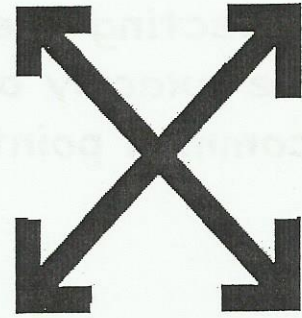
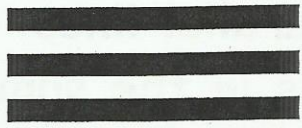
the formula for
finding the area of a
parallelogram

- less than 0
- written with a
negative sign in
front of them

greater than 0

- line segment: part
of a line
- a set of two points
and all the points
between them

line:
goes on and on and on
in both directions



intersecting lines:
have exactly one
common point

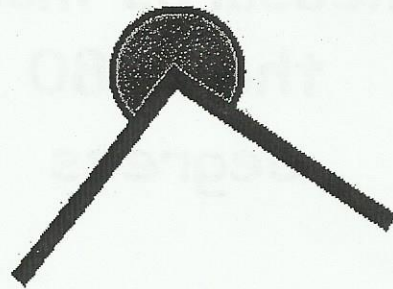
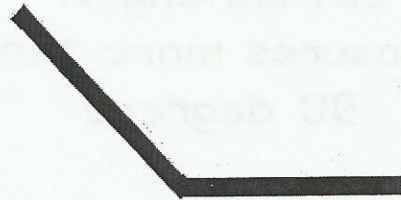
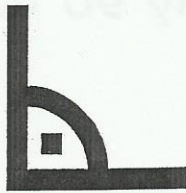
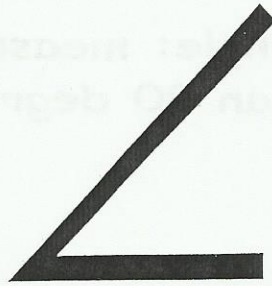
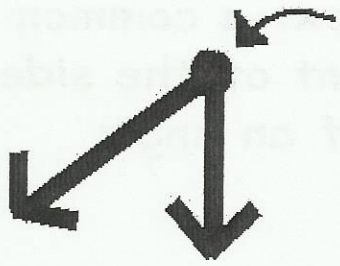
parallel lines:
lines in the same
plane that never
intersect

ray: part of a line
that has a starting
point and no stopping
point

perpendicular lines:
intersecting lines that
form right angles

angle: an opening
between two
intersecting lines, which
are two rays that have
the same endpoint

point: an exact
location



acute angle: measures
less than 90 degrees

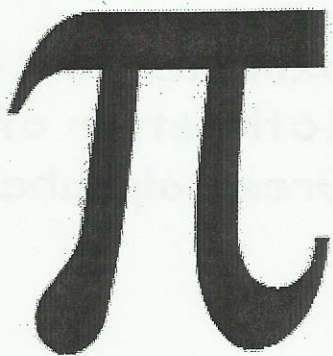
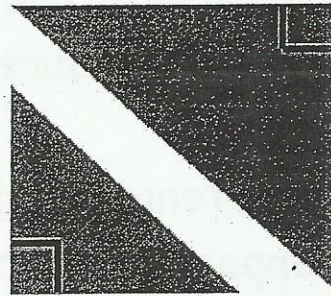
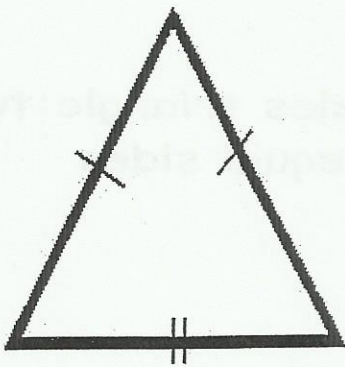
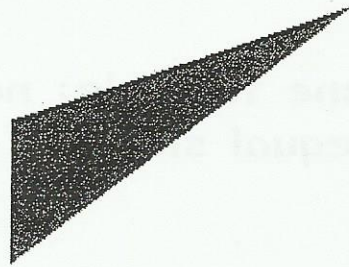
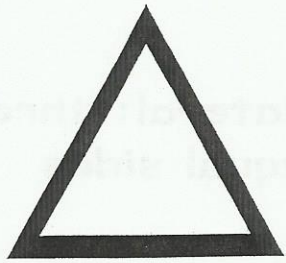
vertex: a common
endpoint of the sides
of an angle

obtuse angle:
measures more than
90 degrees

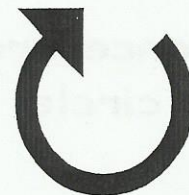
right angle: measures
exactly 90 degrees

measures more
than 180
degrees

- straight angle: an angle that forms a straight line
- measures exactly 180 degrees



circumference



scalene triangle: no
equal sides

equilateral: three
equal sides

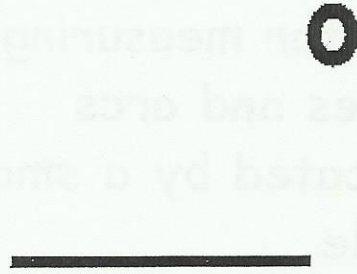
right triangle:

- a triangle with one angle that measures 90 degrees
- the hypotenuse is the side opposite the right angle

isosceles triangle: two
equal sides

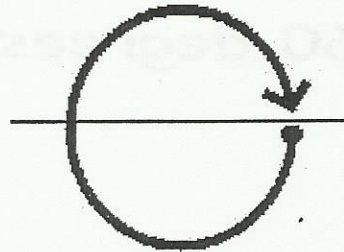
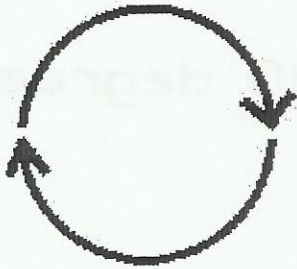
the distance around a
circle

- approximately 3.14
- the 16th letter of the Greek alphabet

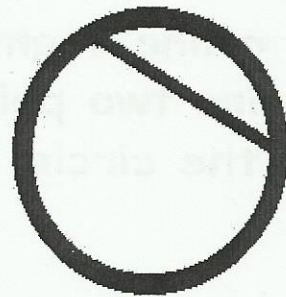


semicircle

circle



radius



degree:

- unit for measuring angles and arcs
- indicated by a small circle

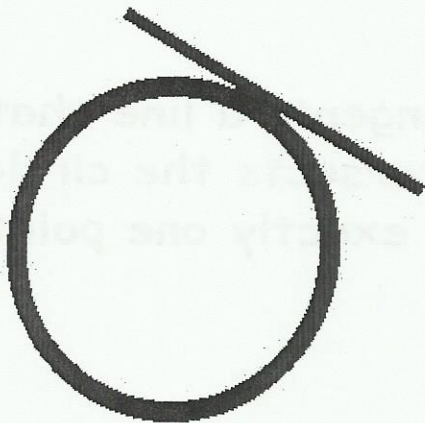
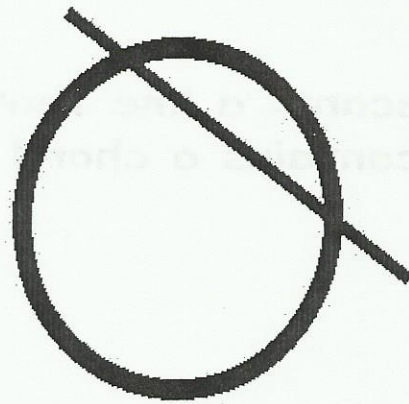
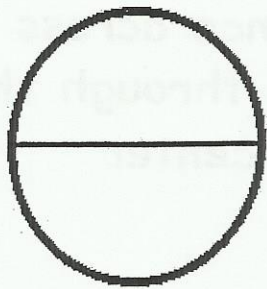
arc: a part of the circumference of a circle

360 degrees

180 degrees

chord: a line segment that joins two points of the circle

the distance from the center of the circle to a point on the circle



π D

πr^2

composite #

$$4 \times 2 \quad 1 \times 8$$

=

8

secant: a line that
contains a chord

diameter: the
distance across a
circle through the
center

formula for finding
the circumference of
a circle

tangent: a line that
intersects the circle
in exactly one point

any whole number
greater than one that
has more than two
factors

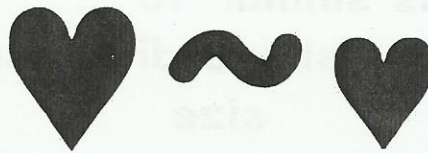
formula for finding
area of circle

prime #

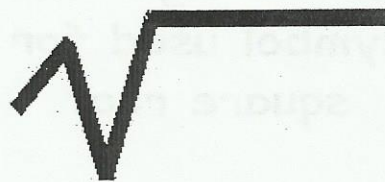
$$1 \times 7$$

=

7



- radar
- 1991



$$\frac{1}{4} \times \frac{4}{1}$$

$$|-4| = 4$$

is similar to ...
same shape, different
size

any whole number
greater than one that
has only two factors -
1 and itself

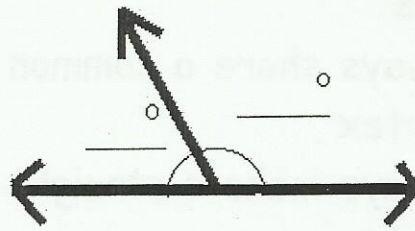
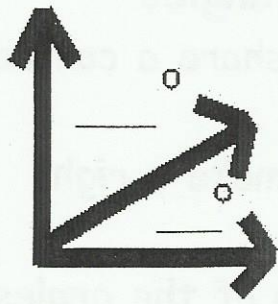
radical sign: the
symbol used for
square root

palindrome:
a word, number or
sentence which reads
forward or backward

absolute value:
• the distance of a
number from 0
• -4 is 4 "spaces"
away on the # line

multiplicative inverse

- reciprocal
- a fraction flipped upside
down
- when you invert a
fraction and multiply, the
product is always 1



mean

median

mode

range

supplementary adjacent angles

- always share a common vertex
- always make a straight angle
- the sum of the angles always equals 180°

complementary adjacent angles

- always share a common vertex
- always make a right angle
- the sum of the angles always equals 90 degrees

the middle number when the numbers are in order of least to greatest

- the average of two or more numbers
- add up all the terms
- divide the sum by the number of terms

the difference between the highest and lowest numbers in the data set

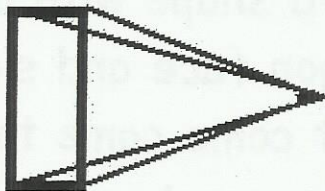
the most frequently occurring number in the data set

\neq

$x < 9$

$x > 9$

$x \leq 9$



\cong

- less than
- statement of inequality

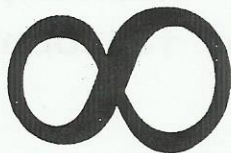
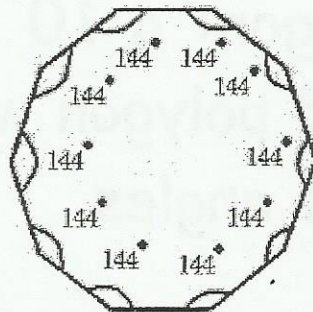
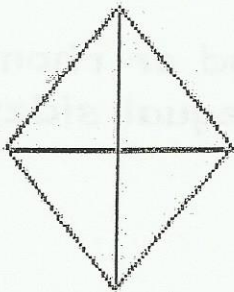
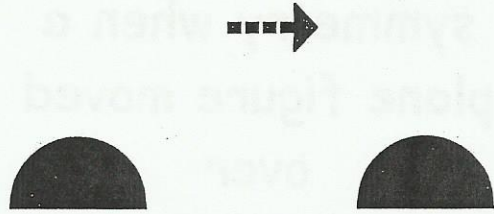
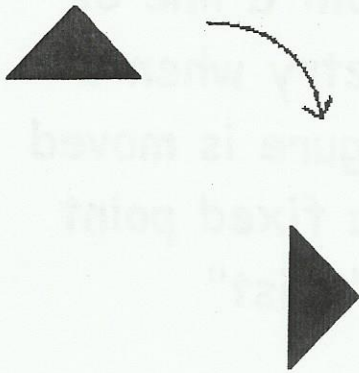
unequal values

- greater than or equal to..
- statement of inequality

- greater than
- statement of inequality

congruent: same size,
same shape

pyramid:
a 3-d shape with one
polygon face and sides
that come to a
vertex



translation: a line of
symmetry when a
plane figure moved
over
"slide"

rotation: a line of
symmetry when a
plane figure is moved
along a fixed point
"twist"

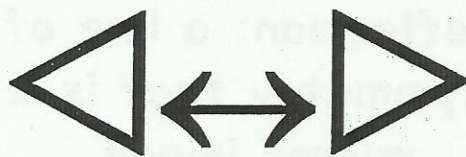
equiangular
decagon: a 10
sided polygon with
equal angles

diamond or rhombus:
4 equal sides

infinity: endless, too
great to count

9:10-

9:25



reflection: a line of
symmetry that is a
mirror image
"flip"

elapsed time: the time
that passes from the
start of an activity to
the end of an activity

quotient

probability

PEMDAS

data

difference

dividend

The measurement of how likely an event is to occur

The answer to a division problem

Numbers which have been entered for study

Order of Operations

- Parenthesis
- Exponent
- Multiply
- Divide
- Add
- Subtract

In a division problem, the number being divided

The answer in subtraction

product

9^2

volume

f

0.3

0

power or degree

- 9 is the base 2 is the exponent
- "9 to the 2nd power"
- "9 to the 2nd degree"
- "9 squared"

The answer to a multiplication problem

function:

- a rule which relates the values of one quantity to the values of another variable quantity
- "in and out"

- length x width x height
- the number of cubic units it takes to fill a solid
- labeled as "units cubed"

zero - Used as a place holder or for the empty set

Terminating decimal: a decimal with digits that stop

equation



$\overline{.5}$

**truncated
decimal**



- empty set
- null

A number sentence
using an equal sign

- cutting off a
decimal at a
specified digit
- different than
rounding

"repeating decimal,
repeating decimal":
a decimal with digits
that repeat

union

is not a subset of