

# 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>

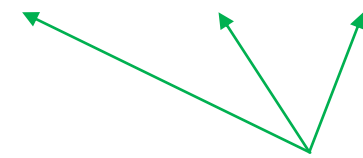
Interactive Math Dictionary, <http://www.amathsdictionaryforkids.com/>

# addend

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# addend

$$33 + 4.7 + 0.9 = 38.6$$

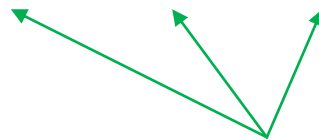


**addends**

---

# 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.

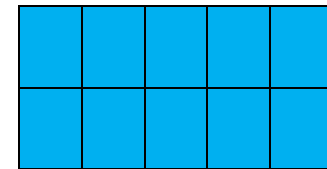
# area

---

area

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

**2 x 5 = 10 square units**



area

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

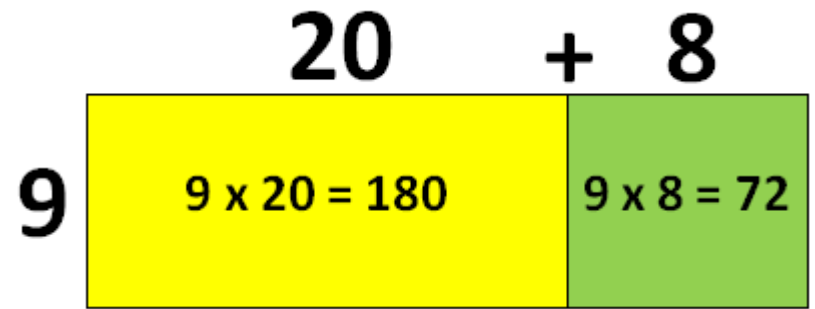
**2 x 5 = 10 square units**



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

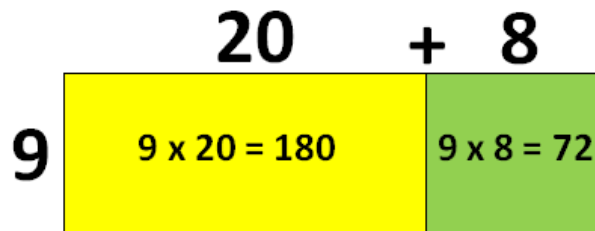
# area model

area model



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

area model



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

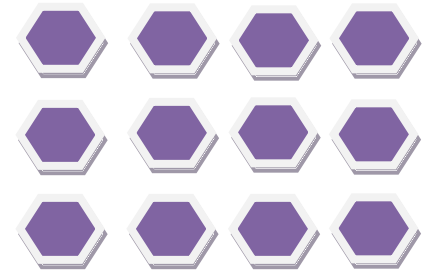
A model of multiplication that shows each place value product

# array

---

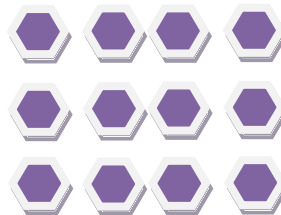
## array

**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

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**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

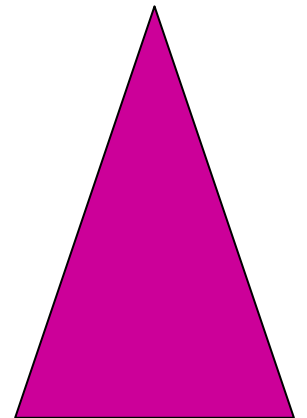
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attribute

large

triangle

pink

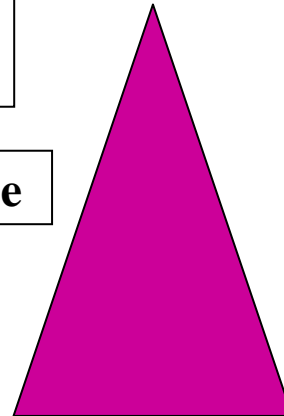


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large

triangle

pink



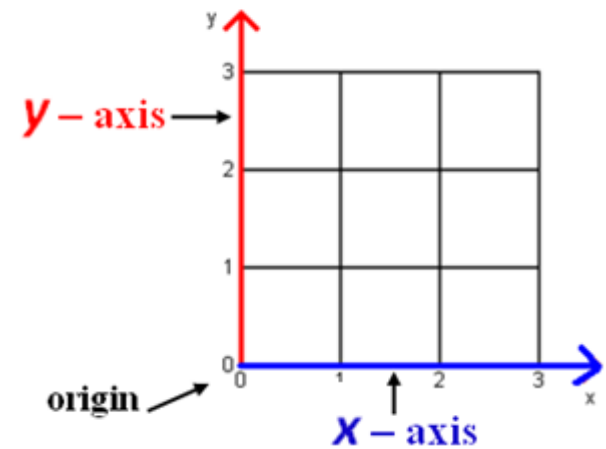
A characteristic.  
e.g. size, shape or color

attribute

# axis

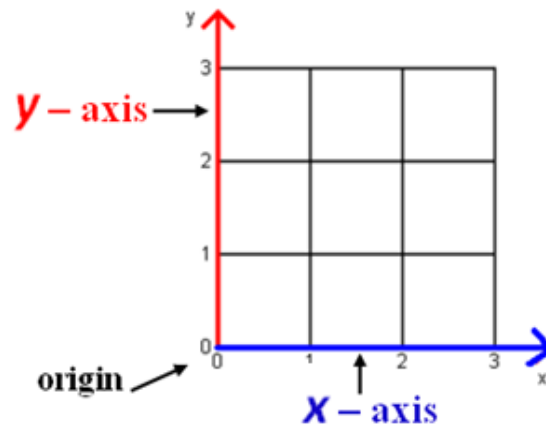
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# axis



---

# axis



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

# base of an exponent

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base of an  
exponent

base → **10**<sup>**4**</sup> Exponent

base of an  
exponent

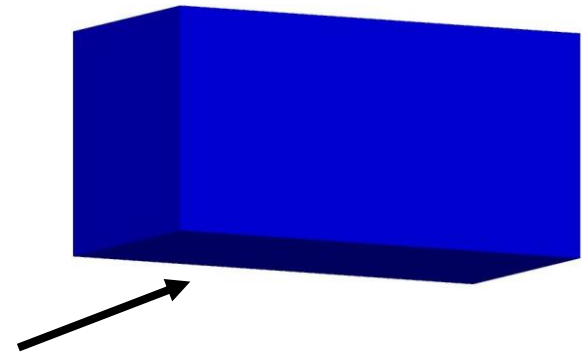
base → **10**<sup>**4**</sup> Exponent

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. ( $10^4 = 10 \times 10 \times 10 \times 10 = 10,000$ )

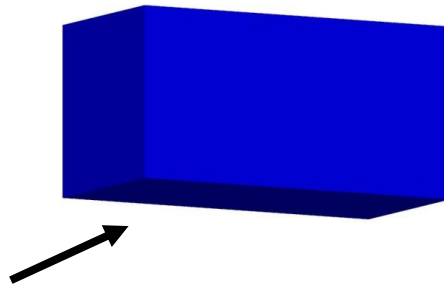
# base of a solid figure

---

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**

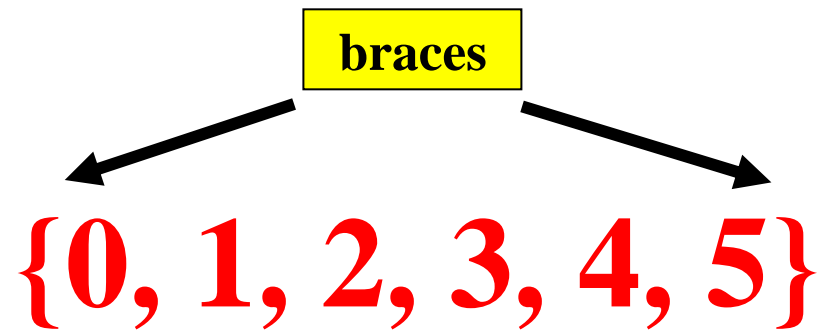
$$\frac{1}{4} \quad \frac{1}{3} \quad \frac{1}{2} \quad \frac{2}{3} \quad \frac{3}{4}$$

Fractions that are  
commonly used for  
estimation.

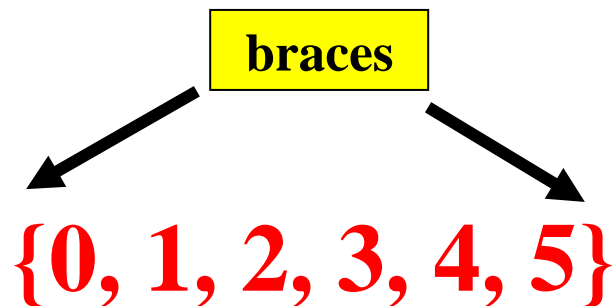
# braces

---

braces



braces



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

# brackets

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

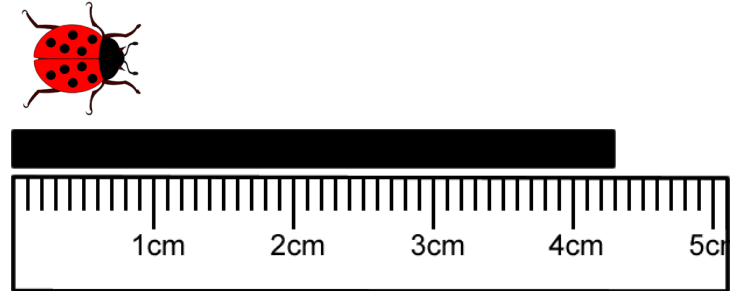
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**brackets**  $[(2 \times 20) + 6]$

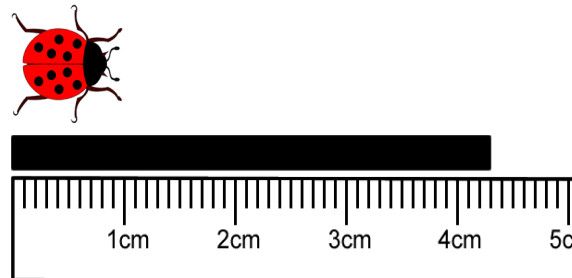
A type of grouping symbol used in pairs that tells what operation to complete first.

# centimeter (cm)

centimeter  
(cm)



centimeter  
(cm)



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



# Commutative Property of Addition

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Commutative  
Property of  
Addition

$$5 + 3 = 3 + 5$$

Commutative  
Property of  
Addition

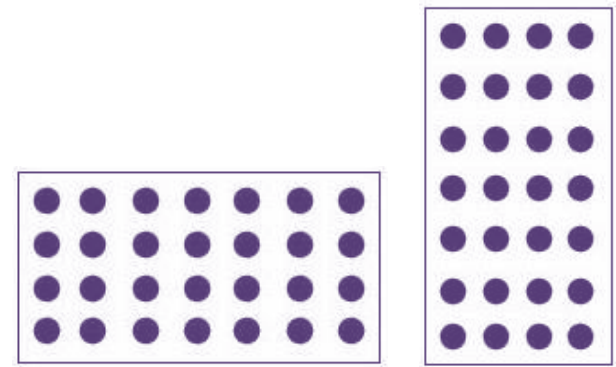
$$5 + 3 = 3 + 5$$

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

---

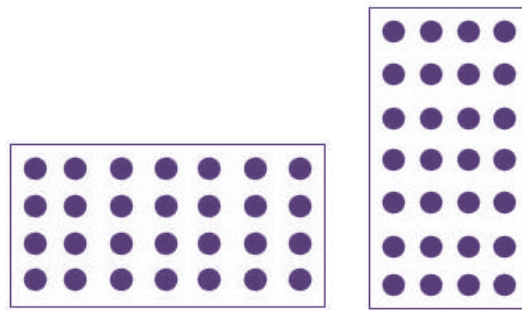
## Commutative Property of Multiplication



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

---

## Commutative Property of Multiplication



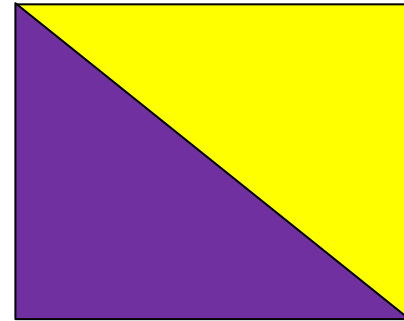
$$4 \times 7 = 7 \times 4$$

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

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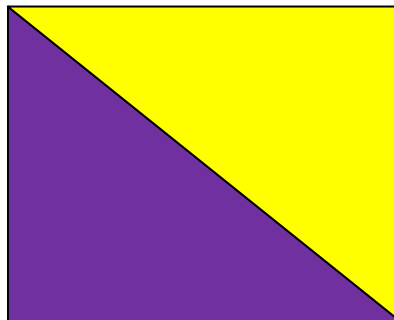
## compose



2 triangles can form a rectangle

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## compose



2 triangles can form a rectangle

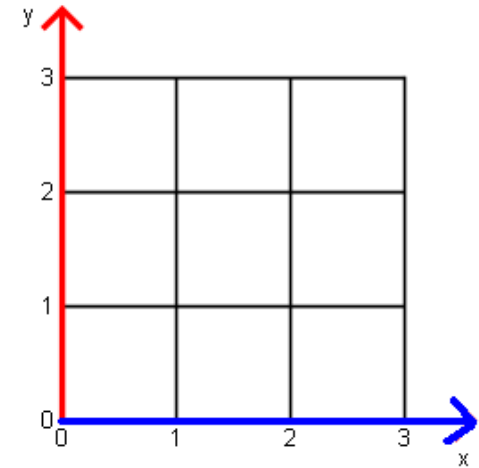
To put together, as in  
numbers or shapes.

# coordinate plane

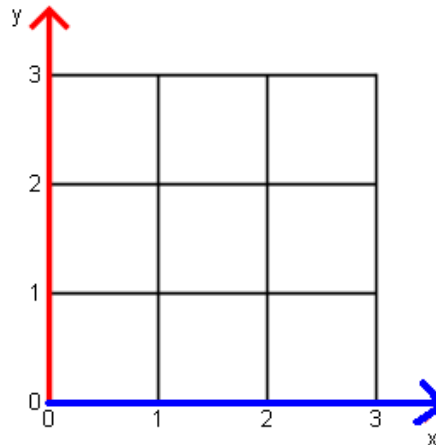
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## coordinate plane

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## coordinate plane

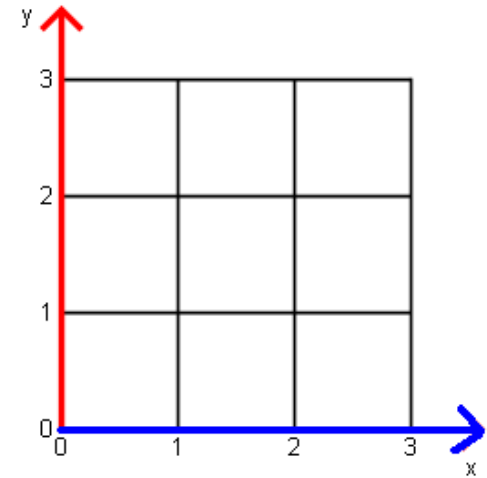


A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called coordinate *grid* or coordinate *system*.)

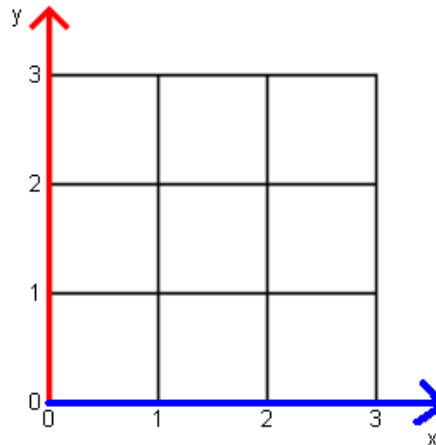
# coordinate system

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## coordinate system



## coordinate system

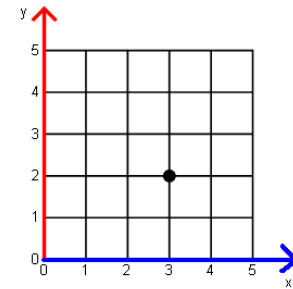


Also known as a coordinate grid. A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes.

# coordinates

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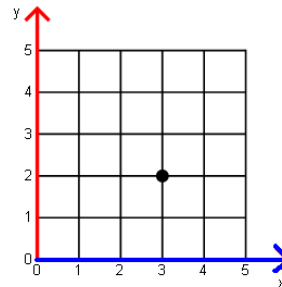
coordinates



**(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 <sup>st</sup> Term	2 <sup>nd</sup> Term	3 <sup>rd</sup> Term	4 <sup>th</sup> Term
Add 3	3	6	9	12
Add 6	6	12	18	24

## corresponding terms



	1 <sup>st</sup> Term	2 <sup>nd</sup> Term	3 <sup>rd</sup> Term	4 <sup>th</sup> Term
Add 3	3	6	9	12
Add 6	6	12	18	24

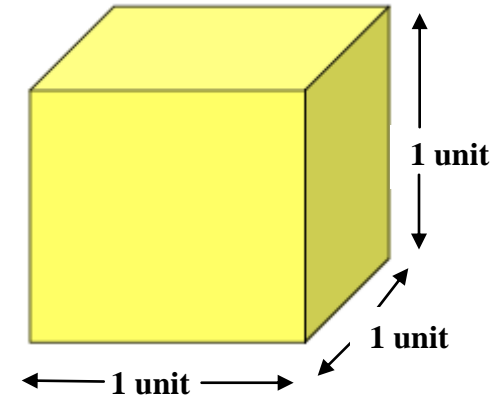
Terms that are in the same position in a sequence of numbers.

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

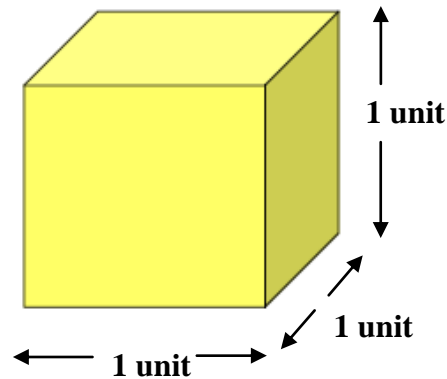
# cubic unit

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cubic unit



cubic unit



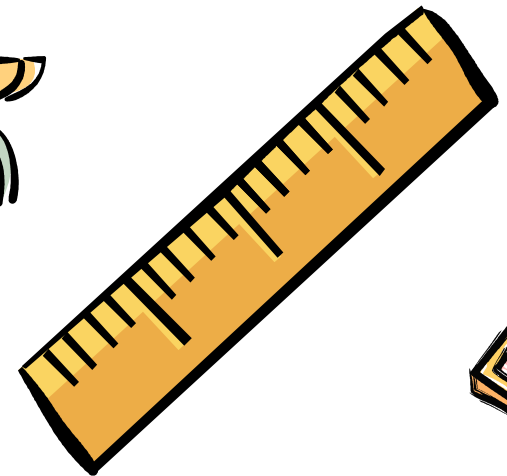
A unit such as a cubic meter to measure volume or capacity.



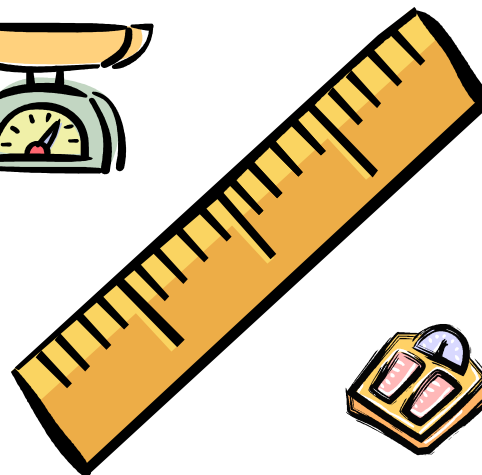
# customary system

---

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 <sup>st</sup> Grade	15
2 <sup>nd</sup> Grade	34
3 <sup>rd</sup> Grade	9
4 <sup>th</sup> Grade	16
5 <sup>th</sup> Grade	29
6 <sup>th</sup> Grade	11

data



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

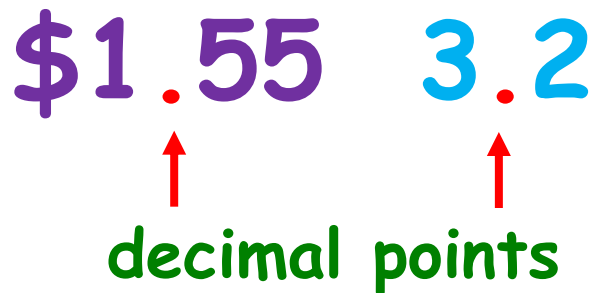
\$1.55    3.2



decimal points

decimal  
point

\$1.55    3.2



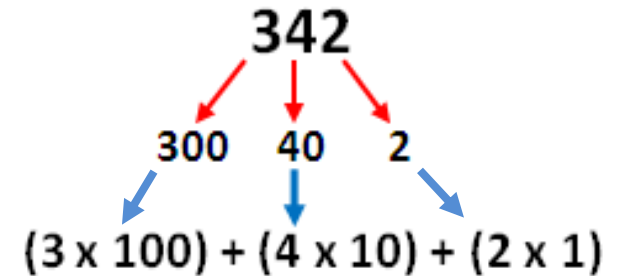
decimal points

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

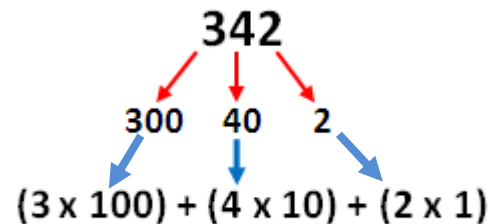
# decompose

---

# decompose



# decompose

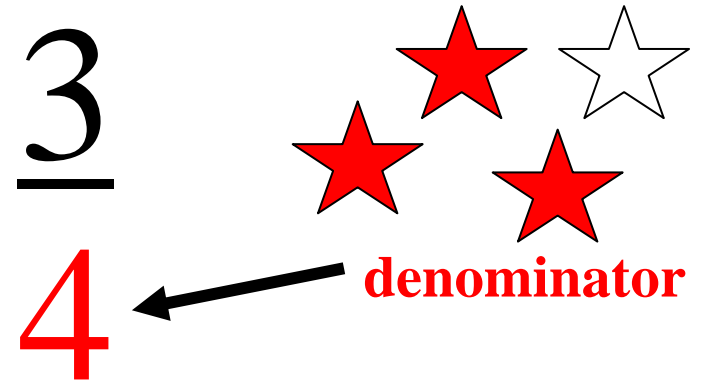


To separate into  
components or basic  
elements.

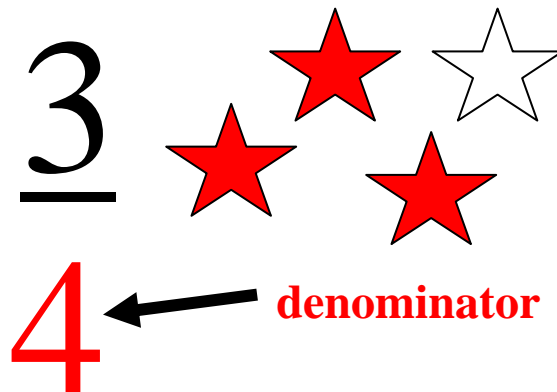
# denominator

---

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

$$49.75 - 13.9 = 35.85$$

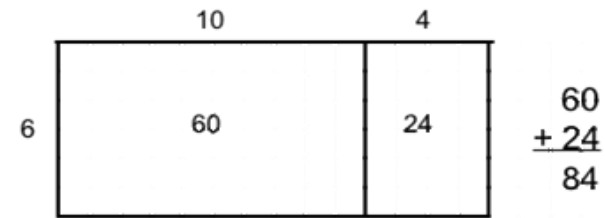
**difference**



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

# Distributive Property

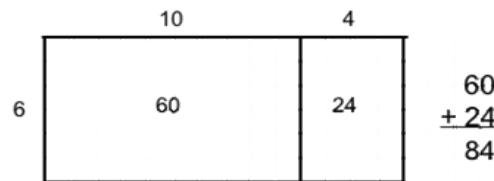
## Distributive Property



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

$$\begin{array}{l} \text{6 x (10 + 4)} \\ \text{(6 x 10) + (6 x 4)} \\ 60 + 24 = 84 \end{array}$$

## Distributive Property



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

$$\begin{array}{l} \text{6 x (10 + 4)} \\ \text{(6 x 10) + (6 x 4)} \\ 60 + 24 = 84 \end{array}$$

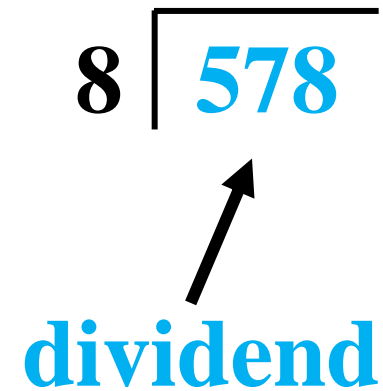
When one of the factors of a product is a sum, multiplying each addend before adding does not change the product.



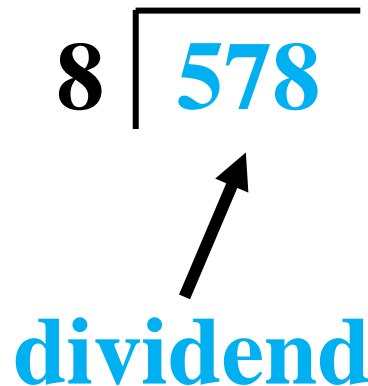
# dividend

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# dividend



# dividend

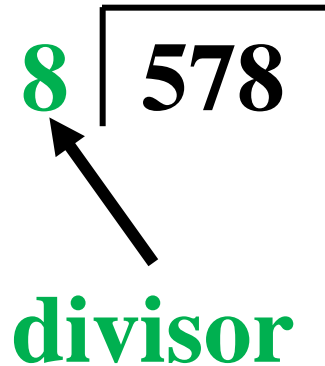


A quantity to be divided.

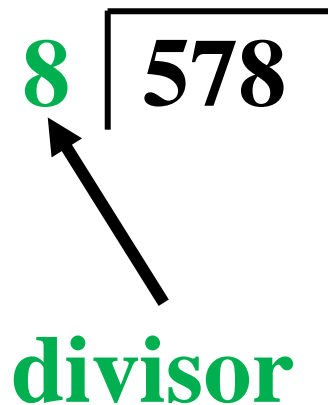
# divisor

---

# divisor



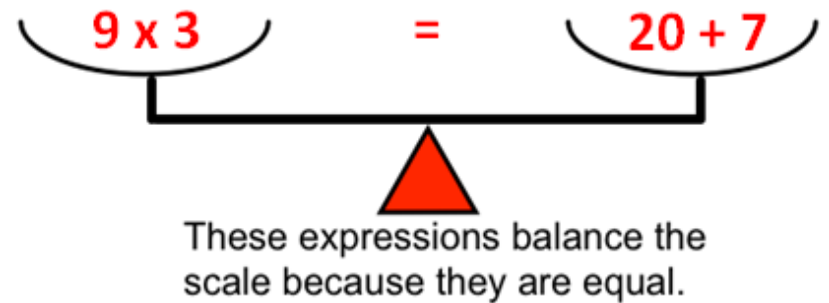
# divisor



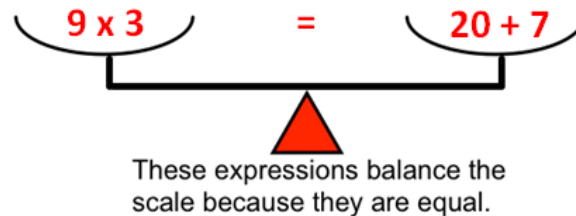
The quantity by which  
another quantity is to be  
divided.

# equation

equation



equation

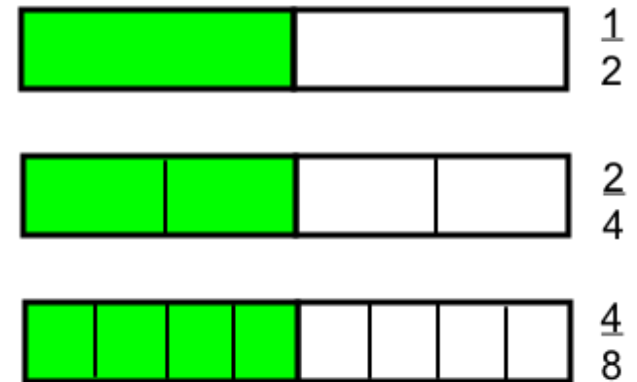


A statement that two mathematical expressions are equal.

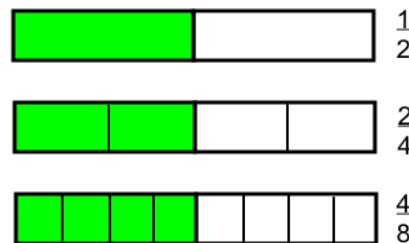
# equivalent fraction

---

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

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

base → **10**<sup>**4**</sup> ← Exponent

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

---

# exponent

base → **10**<sup>**4**</sup> ← 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

$$x + 3$$

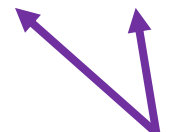
no equal sign.

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

# factor

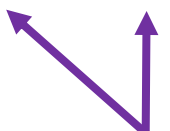
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## factor

$$2 \times 6 = 12$$


factors

## factor

$$2 \times 6 = 12$$


factors

An integer that divides evenly into another.

# finite decimal

---

finite  
decimal

Example:

0.25

---

finite  
decimal

Example:

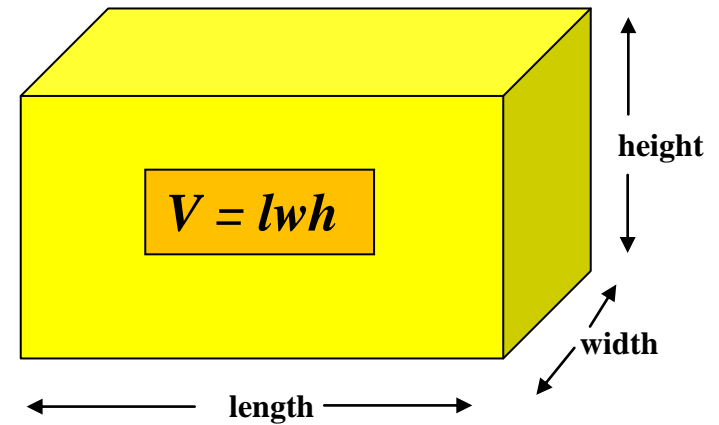
0.25

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

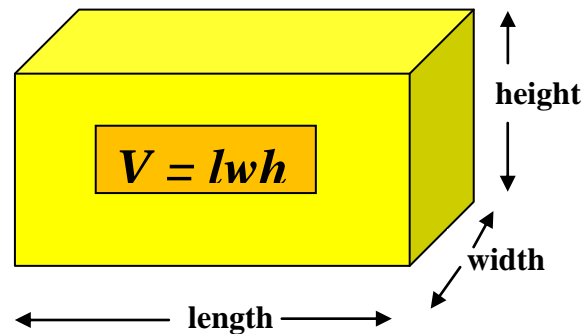
# formula

---

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



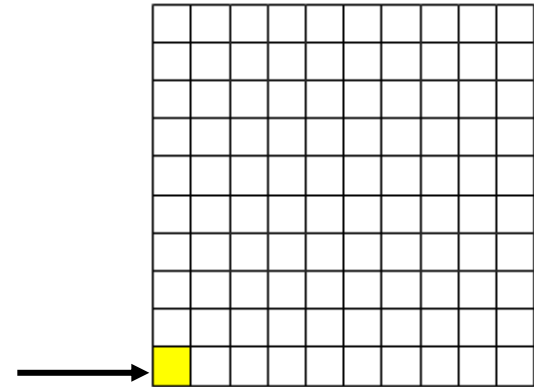
$$5 > 3$$

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

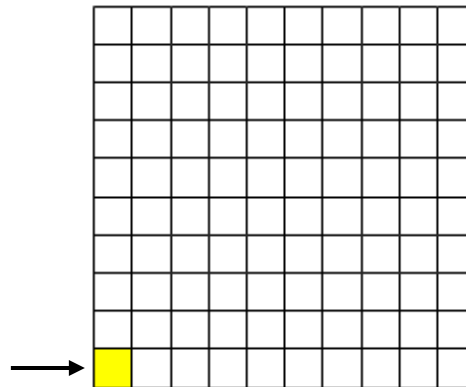
# hundredth

---

## 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**

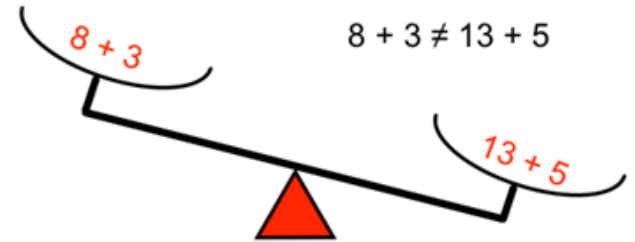
A fraction where the numerator is greater than or equal to the denominator.



# inequality

---

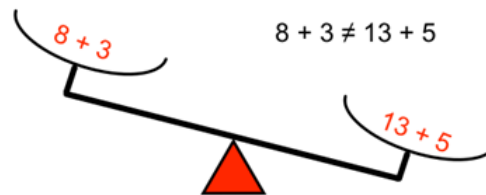
# inequality



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

---

# inequality



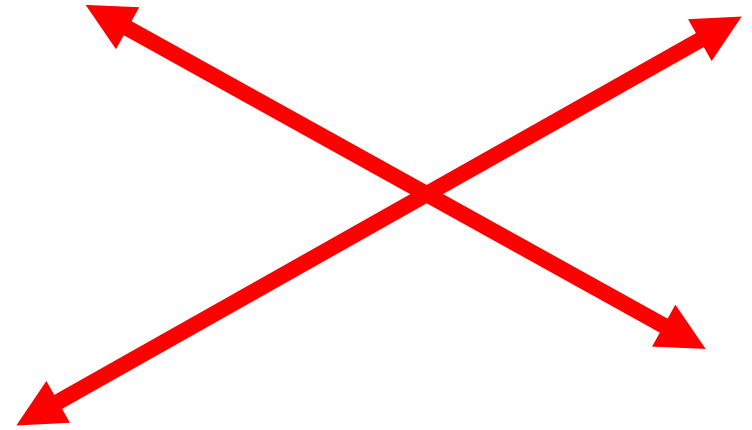
These expressions **do not** balance the scale because they are **not** equal.

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

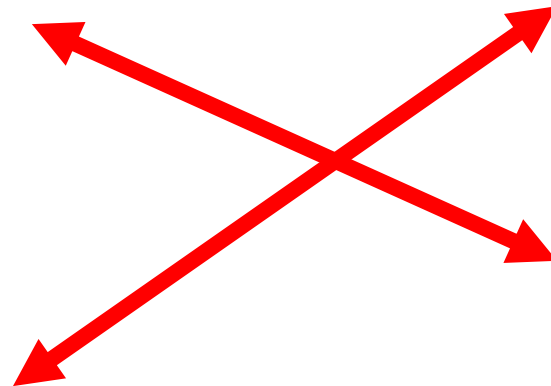
# intersect

---

## intersect



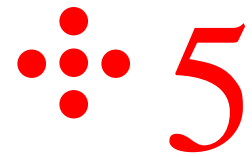
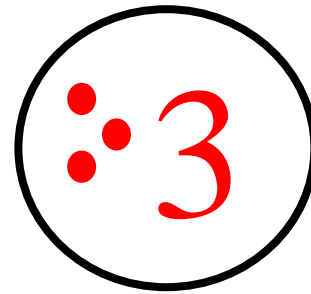
## intersect



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

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like  
denominators

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

---

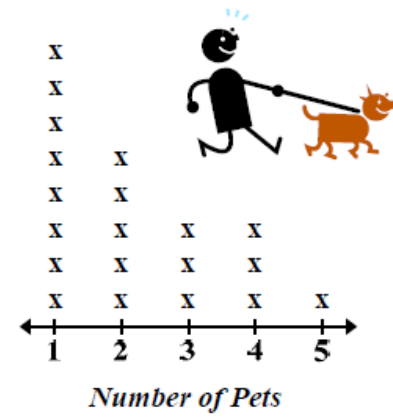
like  
denominators

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

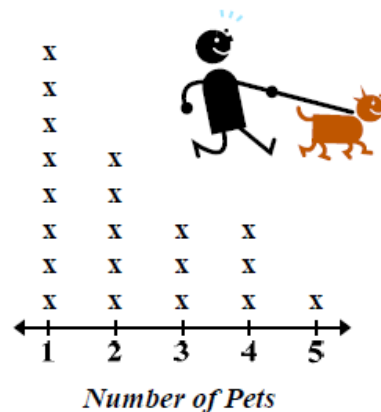
Denominators in two  
or more fractions that are  
the same.

# line plot

# line plot



# line plot



A diagram showing frequency of data on a number line.

# long division

---

## long division

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

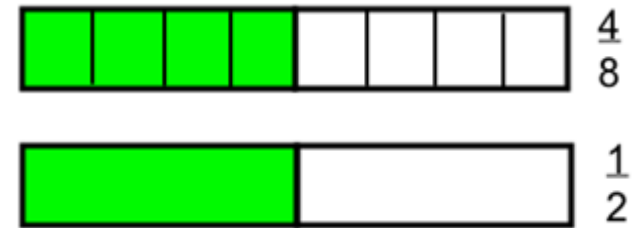
## long division

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

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

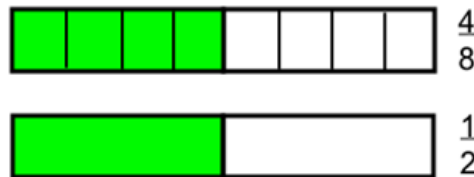
# lowest terms

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.

