

# Secondary 1

## Vocabulary Cards and Word Walls

Revised: March 16, 2012

### 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/>

# absolute value equation

---

absolute value  
equation

$$|3x - 7| = 23$$

absolute  
value  
equation

$$|3x - 7| = 23$$

An equation with a  
variable within an  
absolute value symbol.

# absolute value inequality

---

absolute value  
inequality

$$18 < |-2x + 6|$$

absolute

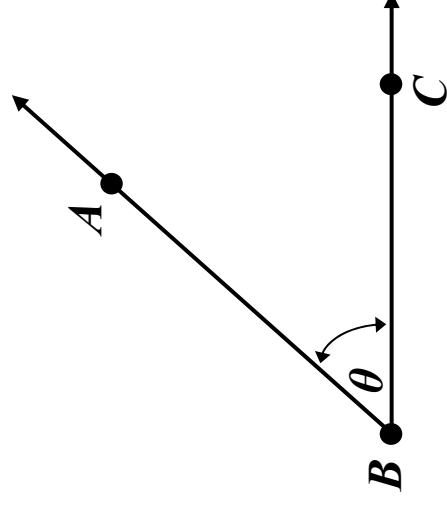
value

inequality

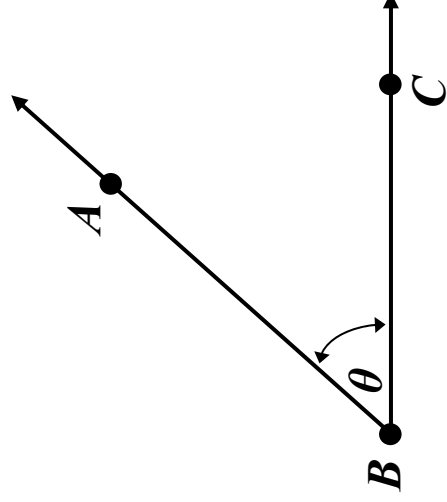
$$18 < |-2x + 6|$$

An inequality that has a  
variable within an  
absolute value symbol.

# angle



# angle



The union of two rays that have the same endpoint.

# angle

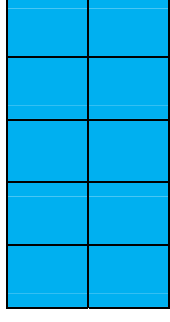
# area

---

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

**or**

**$2 \cdot 5 = 10$  square units**



# area

---

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

**or**

**$2 \cdot 5 = 10$  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

# arithmetic sequence

## arithmetic sequence

$$a_n = a_1 + (n - 1)d$$

The first term is  $a_1$ , the common difference is  $d$ , and the number of terms is  $n$ .

**Example:** 3, 7, 11, 15, 19

$$a_1 = 3, d = 4, n = 5$$

The explicit formula is

$$a_n = 3 + (n - 1) \cdot 4 = 4n - 1$$

$$a_n = a_1 + (n - 1)d$$

The first term is  $a_1$ , the common difference is  $d$ , and the number of terms is  $n$ .

**Example:** 3, 7, 11, 15, 19

$$a_1 = 3, d = 4, n = 5$$

The explicit formula is

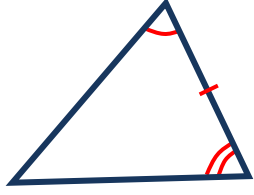
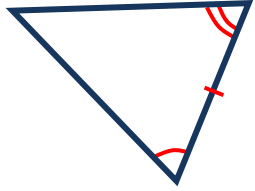
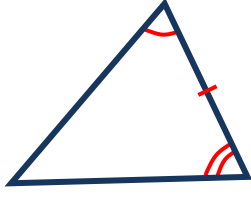
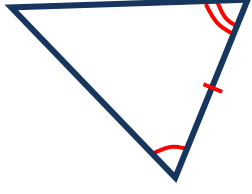
$$a_n = 3 + (n - 1) \cdot 4 = 4n - 1$$

A sequence such as 1, 5, 9, 13, 17, 21 or 12, 7, 2, -3, -8, -13 which has a constant difference between terms.

## arithmetic sequence

# ASA

# ASA

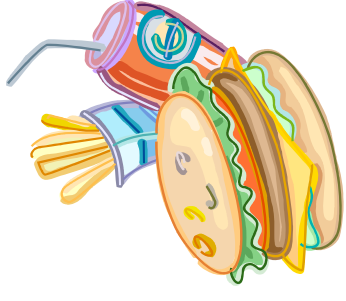


## ASA (Angle-Side-Angle)

If two angles and the included side of one triangle are congruent to the corresponding angles and included side of another triangle, then the triangles are congruent.

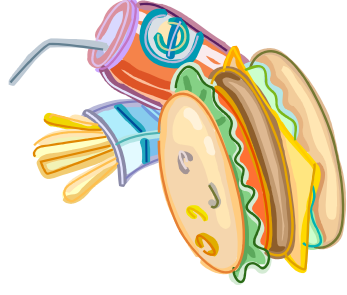
# ASA

# association



**The more food you eat, the more calories you ingest.**

# association



**The more food you eat, the more calories you ingest.**

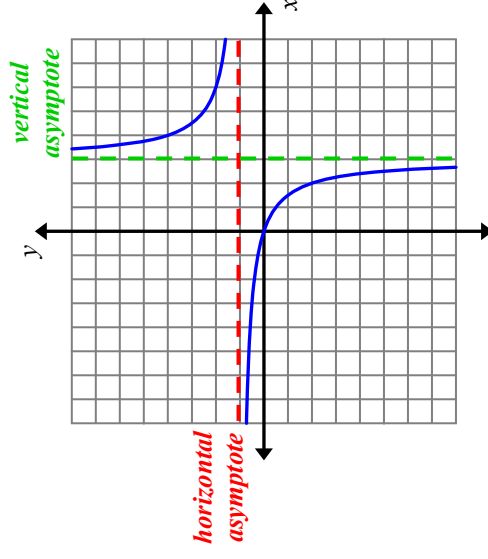
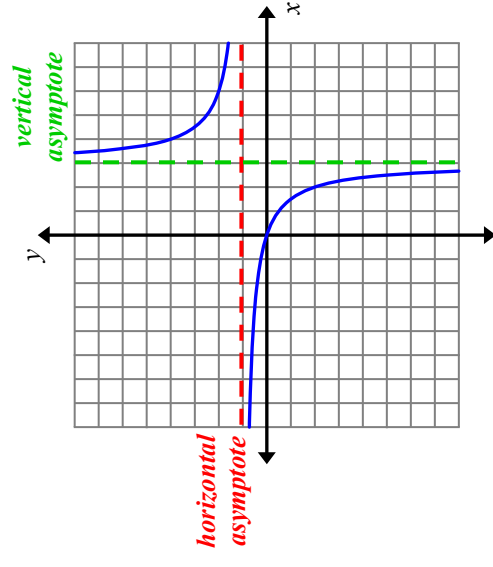
Any relationship between two measured quantities that renders them statistically dependent. The term “association” refers broadly to any such relationship, whereas the “correlation” refers to a linear relationship between two quantities.

# association



# asymptote

# asymptote

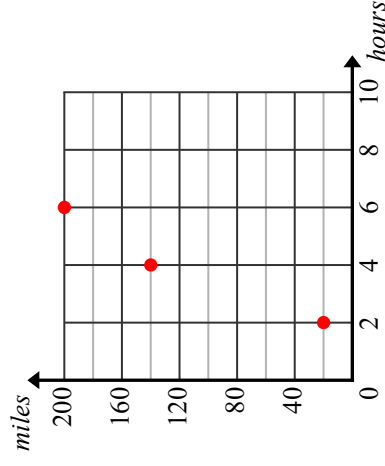


A line that the graph of a function gets closer to as  $x$  or  $y$  gets larger in absolute value.

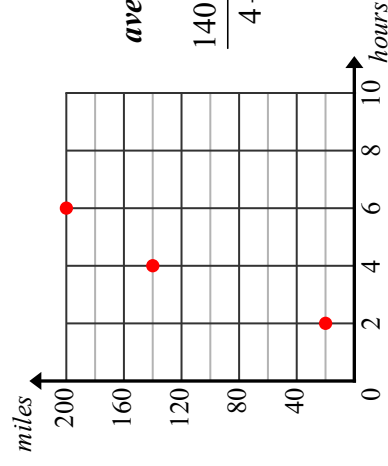
# asymptote

# average rate of change

## average rate of change



$$\text{average rate of change} \\ \frac{140 - 20}{4 - 2} = \frac{120}{2} = 60 \text{ mph}$$

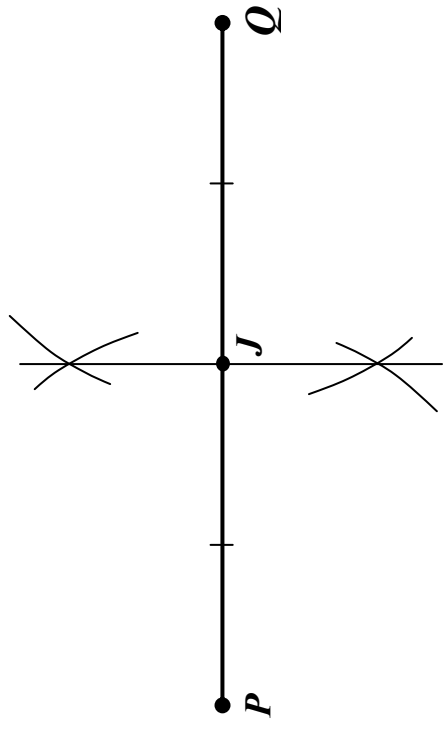


$$\text{average rate of change} \\ \frac{140 - 20}{4 - 2} = \frac{120}{2} = 60 \text{ mph}$$

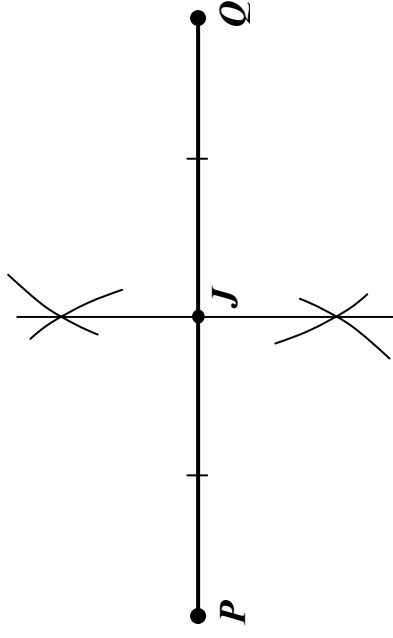
The average rate of change of a function between any two points is the slope of the line connecting those two points.

## average rate of change

# bisect



# bisect

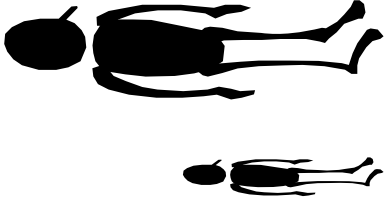


Divide into two equal parts.

# bisect

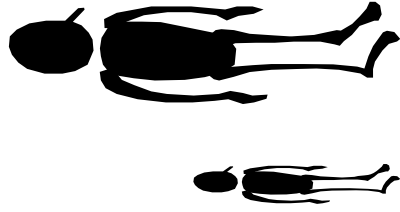
# bivariate data

## bivariate data



<i>Height (inches)</i>	<i>Weight (pounds)</i>
67	155
72	220
77	240
74	195
69	175

## bivariate data

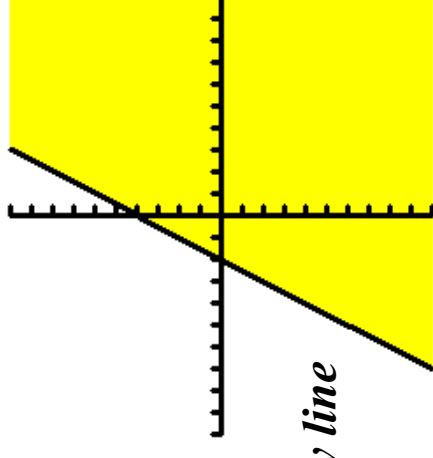


<i>Height (inches)</i>	<i>Weight (pounds)</i>
67	155
72	220
77	240
74	195
69	175

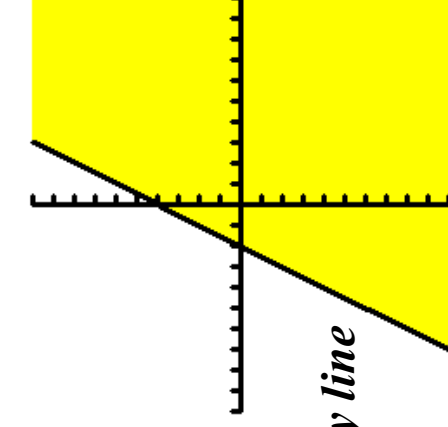
A set of data that show the relationship between two variables.

# boundary line

## boundary line



*boundary line*



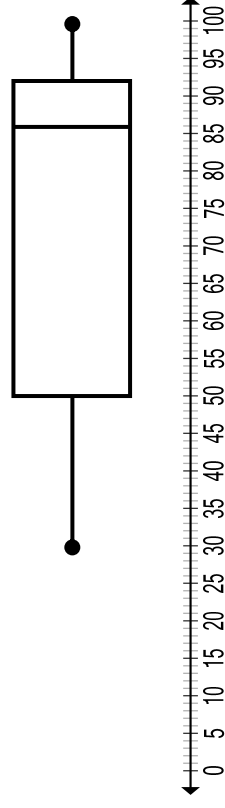
*boundary line*

## boundary line

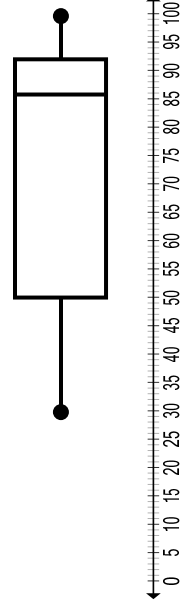
The line that divides a plane into two half-planes, e.g., when graphing the inequality  $y \leq 2x + 4$  the boundary line is the graph  $y = 2x + 4$ . The boundary line may or may not be part of the solution to an inequality.

# box plot

# box plot



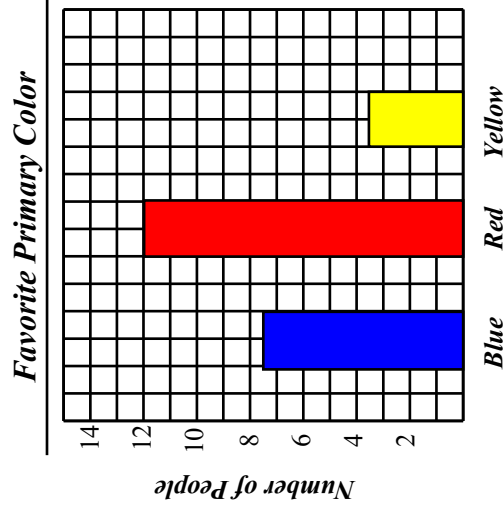
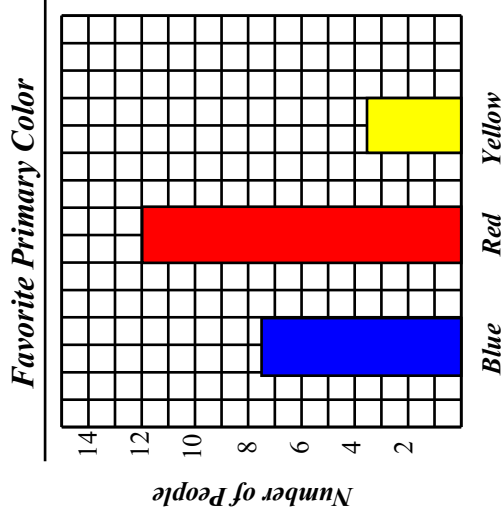
# box plot



A diagram that shows the five number summary of a distribution. (Five number summary includes lowest value, lower quartile, median, upper quartile, and highest value.)

# categorical (qualitative) data

## categorical (qualitative) data



Data where the values of the variables are merely the names of discrete, independent categories. The categories can be given numerical codes, but they cannot be ranked, added, multiplied or measured against each other.

## categorical (qualitative) data

# causation

*Ulcers are caused by stress and spicy food.*

There is a *correlation* between the independent variables (stress/spicy food) and the dependent variable (ulcers) but the independent variables were **NOT** the cause. We know that ulcers are caused by a corkscrew-shaped bacterium *Helicobacter pylori* (H.pylori).

# causation

*Ulcers are caused by stress and spicy food.*

There is a *correlation* between the independent variables (stress/spicy food) and the dependent variable (ulcers) but the independent variables were **NOT** the cause. We know that ulcers are caused by a corkscrew-shaped bacterium *Helicobacter pylori* (H.pylori).

# causation

The relationship between cause and effect. This occurs **only** when the relationship between the two variables can be proven through a scientific experiment following strict guidelines. Only in this way can we rule out other factors that may affect the relationship that we see in the observed values.



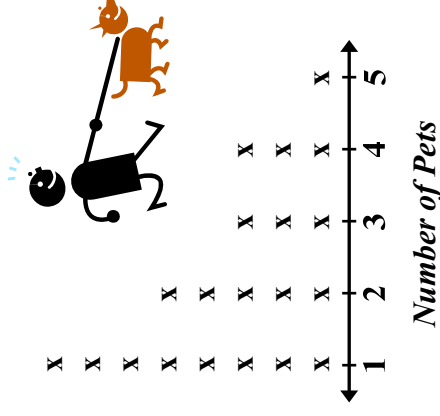
# center

**Examples:**

**Mode = 1**

**Median = 2**

**Mean = 2.3**



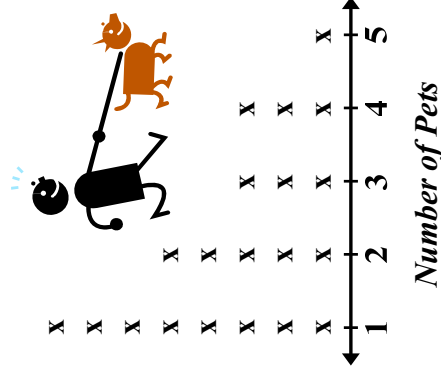
An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (Also called measures of central tendency or measures of average.)

**Examples:**

**Mode = 1**

**Median = 2**

**Mean = 2.3**



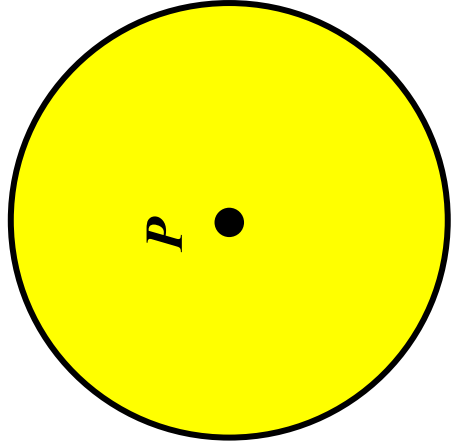
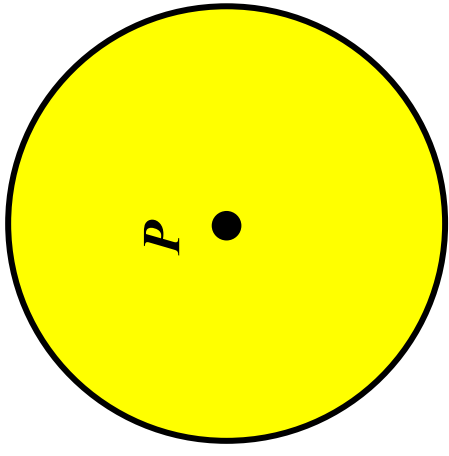
# center

# center

# circle

---

# circle



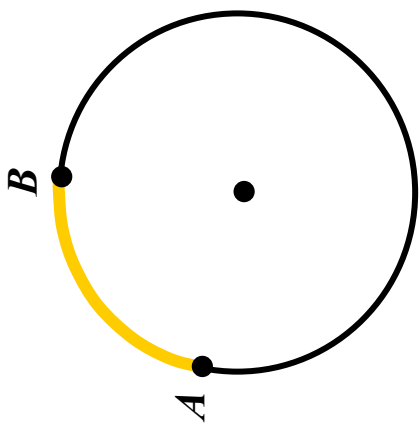
A plane figure with all points the same distance from a fixed point called a center.

# circle

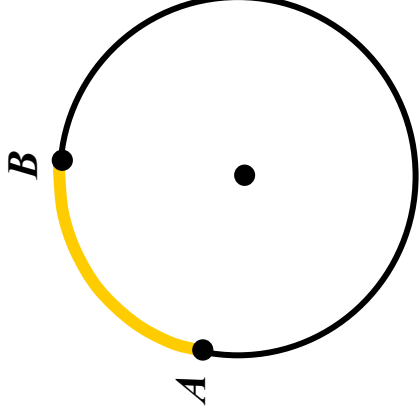
# circular arc

---

**circular**  
**arc**



**circular**  
**arc**

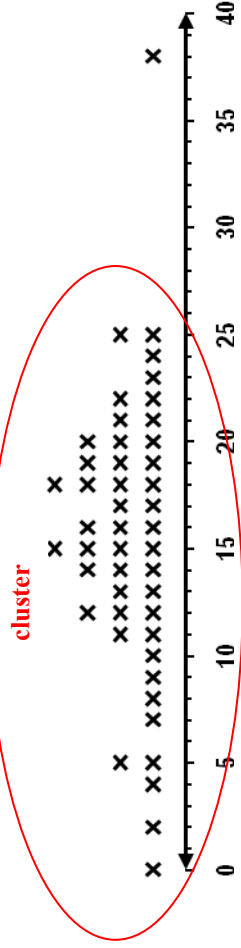


A segment of the  
circumference of a  
circle.

# cluster



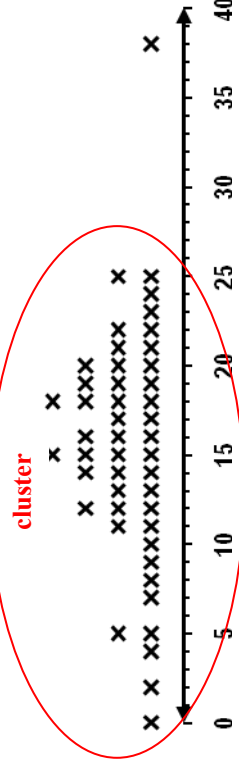
Hours Watching TV In One Week



# cluster



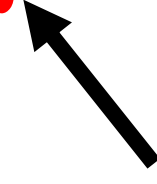
Hours Watching TV In One Week



A group of the same or similar elements gathered or occurring closely together on a graph.

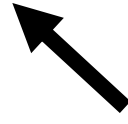
# cluster

# coefficient

**5** $x$  

coefficient

# coefficient

**5** $x$  

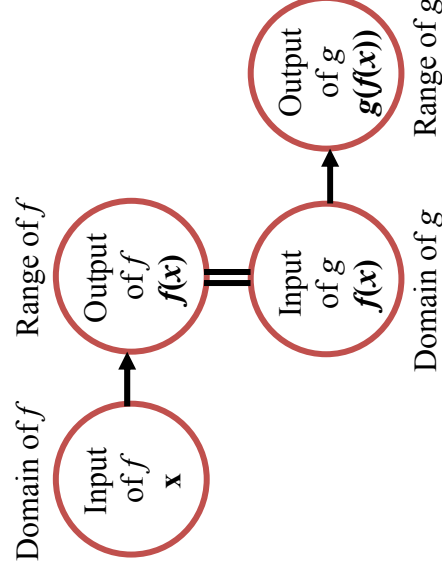
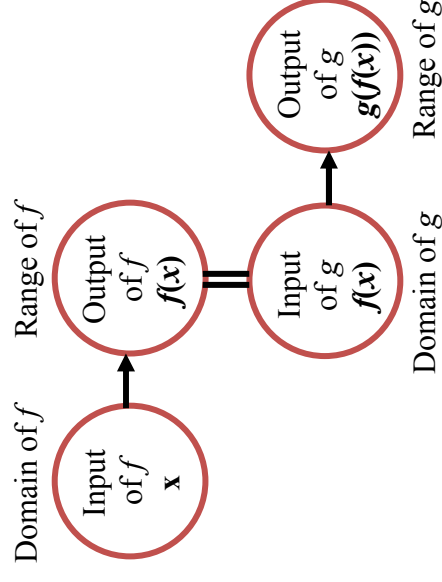
coefficient

A numerical factor in a term of an algebraic expression.

# coefficient

# composition of functions

## composition of functions



The output from the first function becomes the input for the second function. Usually written as  $f(g(x))$  or  $(f \circ g)(x)$ .

## composition of functions

# compound inequality

---

**compound  
inequality**

$$-1 < x \text{ and } x \leq 3$$

$$x < -1 \text{ or } x \geq 3$$

**compound  
inequality**

$$-1 < x \text{ and } x \leq 3$$

$$x < -1 \text{ or } x \geq 3$$

A mathematical sentence  
with two inequality  
statements joined by  
“and” or “or”.

# conditional relative frequency

## conditional relative frequency

	Dance	Sports	Movies	TOTAL
Women	0.32	0.12	0.16	0.60
Men	0.04	0.20	0.16	0.40
TOTAL	0.36	0.32	0.32	1.00

## conditional relative frequency

	Dance	Sports	Movies	TOTAL
Women	0.32	0.12	0.16	0.60
Men	0.04	0.20	0.16	0.40
TOTAL	0.36	0.32	0.32	1.00

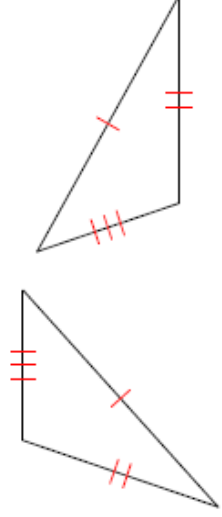
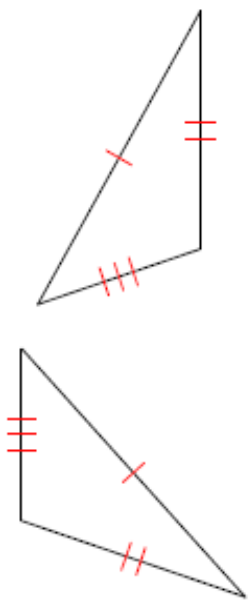
The relative frequencies in the body of the table are called *conditional frequencies* or the *conditional distribution*.



# congruent

---

# congruent

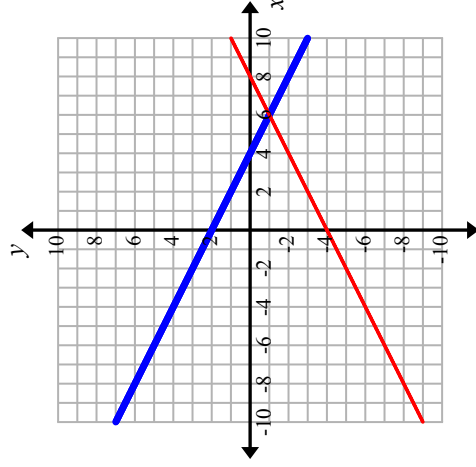
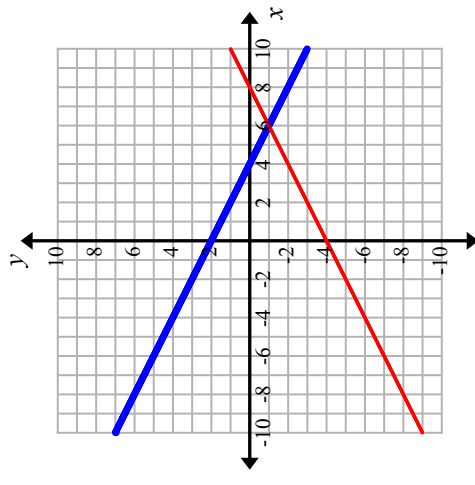


Two figures are congruent if they have the same shape and size.

# congruent

# consistent system

consistent  
system



consistent  
system

A system that has at least  
one solution

# constant percent rate

constant  
percent rate



**3.94%**  
fixed mortgage rate

constant  
percent rate

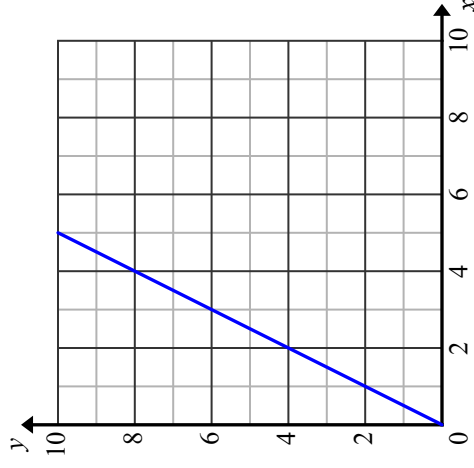
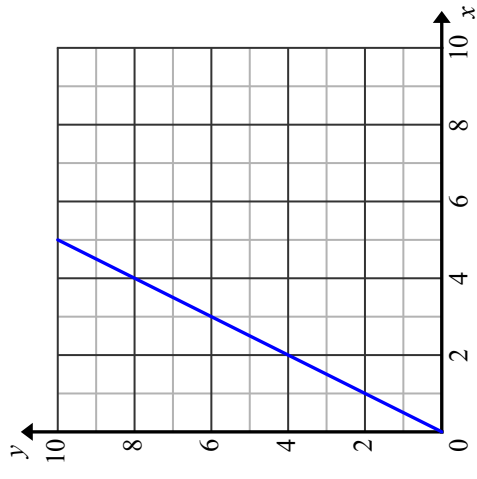


**3.94%**  
fixed mortgage rate

A percentage rate  
without any variation in  
the rate of increase or  
decrease.

# constant rate of change

## constant rate of change



In linear relationships the constant rate of change is illustrated as the slope of the graph of the equation.

This is so because the change in  $y$  divided by the change in  $x$  is constant for any two points on the line.

## constant rate of change

# constant term

constant  
term

$$5x + 4$$



constant

constant

term

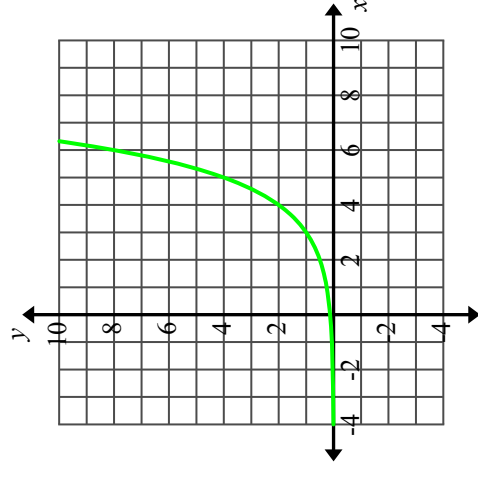
$$5x + 4$$



constant

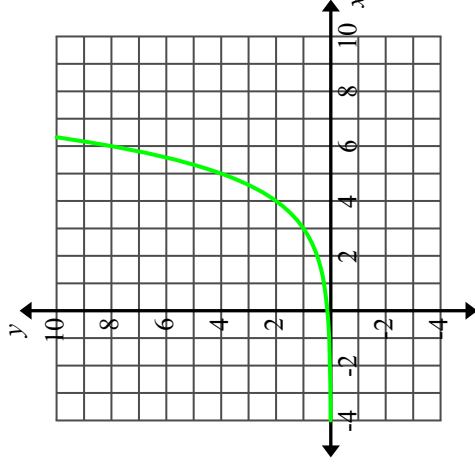
A term whose value  
does not change.

# continuous line or curve



A line or curve that extends without a break or irregularity.

# continuous line or curve



# continuous line or curve

# coordinates

---

coordinates

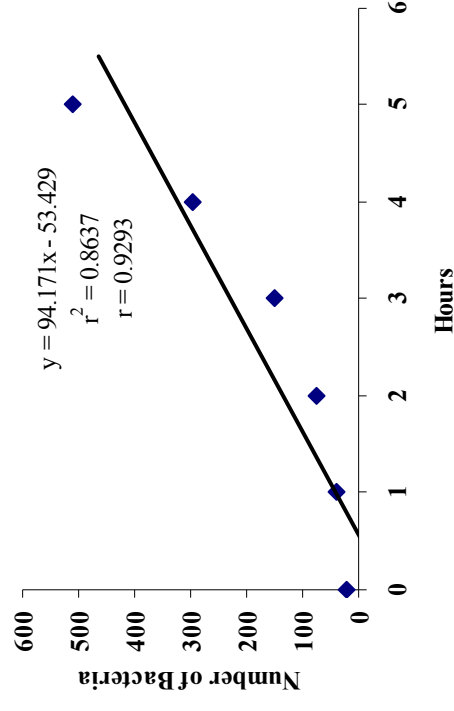
**(3, -5)**  
( $x$  ,  $y$ )

coordinates

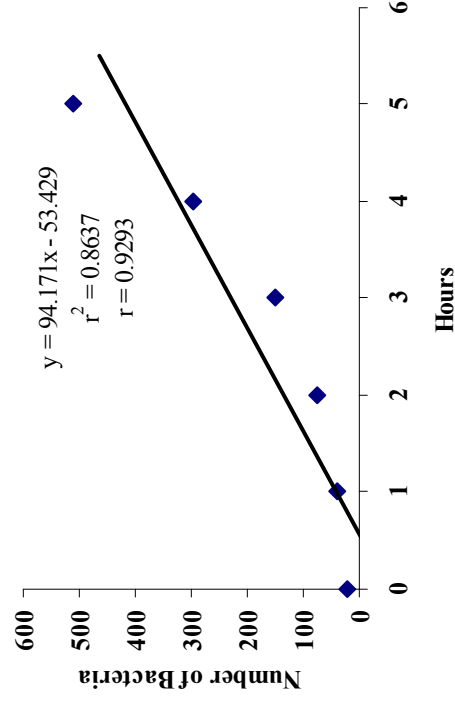
**(3, -5)**  
( $x$  ,  $y$ )

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

# correlation coefficient



# correlation coefficient



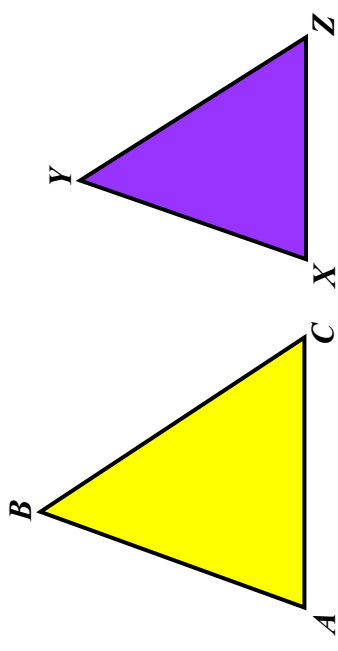
# correlation coefficient

A value that shows the strength of the linear relationship between two variables.



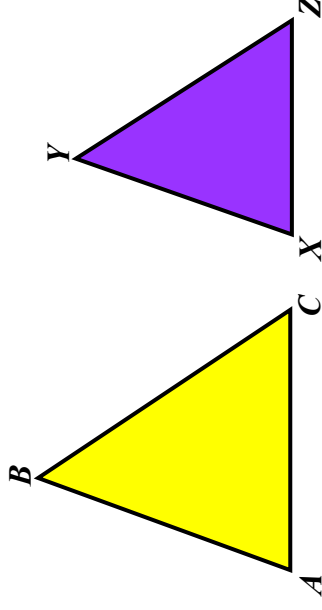
# corresponding side

## corresponding side



$\overline{AB}$  and  $\overline{XY}$  are corresponding sides

## corresponding side



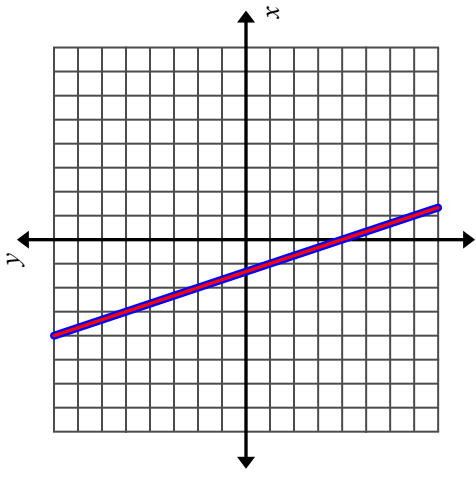
$\overline{AB}$  and  $\overline{XY}$  are corresponding sides

If the relative position is the same in two figures, then they are called corresponding sides.

# dependent system

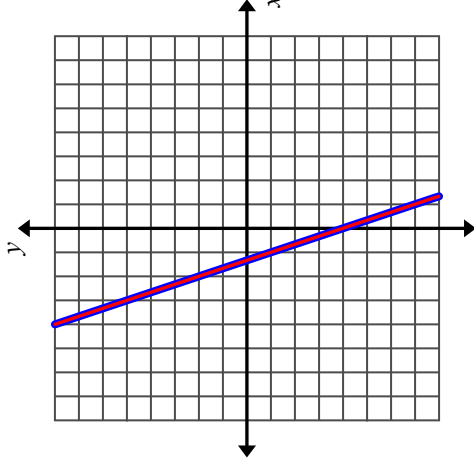
## dependent system

$$3x + y = -4$$
$$-6x - 2y = 8$$



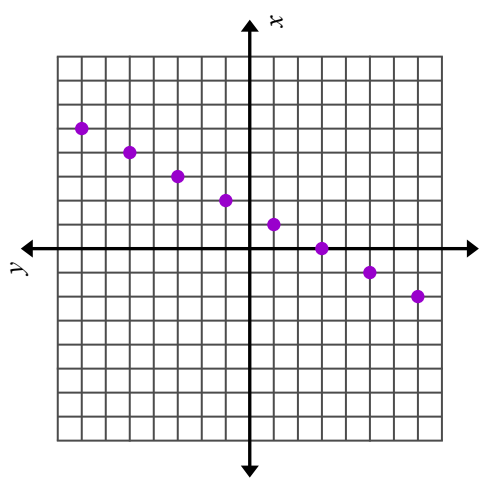
## dependent system

$$3x + y = -4$$
$$-6x - 2y = 8$$

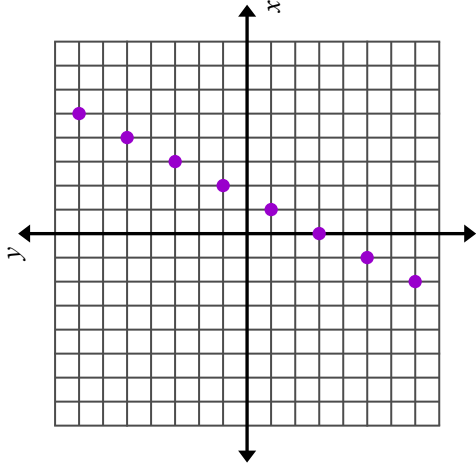


A second version of the same equation, whose graphs coincide with each other.

# discrete



# discrete



A type of data is discrete if there are only a finite number of values possible or if there is a space on the number line between each 2 possible values.

# discrete

# distance formula

---

## distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

## distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

The formula used to find the distance between two points in the  $xy$ -plane.

# domain

---

## domain

$\{(2, -3), (4, 6), (3, -1), (7, 6), (6, 3)\}$

domain:  $\{2, 3, 4, 6, 7\}$

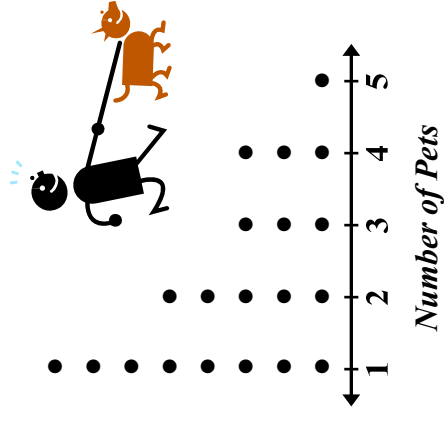
## domain

$\{(2, -3), (4, 6), (3, -1), (7, 6), (6, 3)\}$

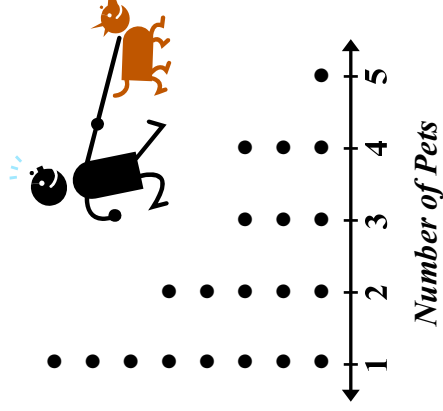
domain:  $\{2, 3, 4, 6, 7\}$

The set of “input” values for which a function is defined.

# dot plot



# dot plot



Also known as a line plot. A diagram showing frequency of data on a number line.

# dot plot

# elimination

$$2x + y = 1$$

$$\frac{3x - y = 19}{5x + 0 = 20}$$

$$5x + 0 = 20$$

Add the equations to get  $x = 4$ .

$$3(4) - y = 19$$

Substitute 4 for  $x$  in the second equation.

$$12 - y = 19$$

$$y = -7$$

Solve for  $y$ .

# elimination

$$2x + y = 1$$

$$\frac{3x - y = 19}{5x + 0 = 20}$$

$$5x + 0 = 20$$

Add the equations to get  $x = 4$ .

$$3(4) - y = 19$$

Substitute 4 for  $x$  in the second equation.

$$12 - y = 19$$

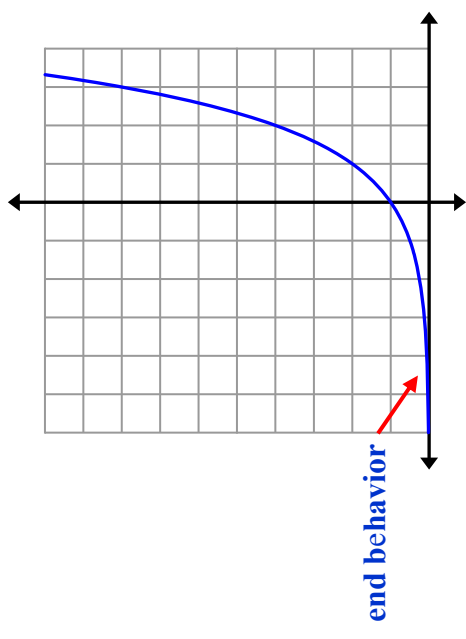
$$y = -7$$

Solve for  $y$ .

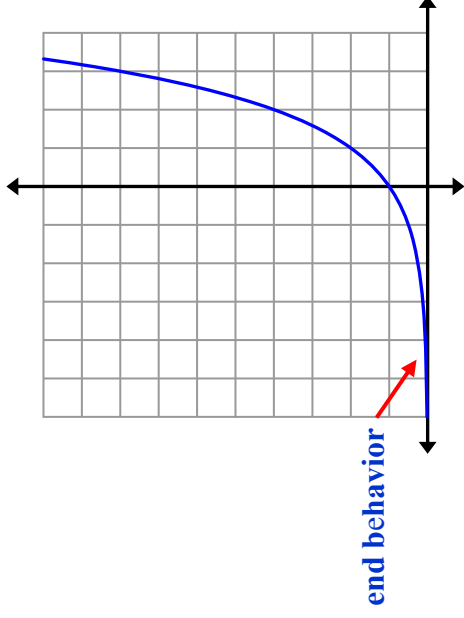
A method for solving a system of linear equations. You add or subtract the equations to eliminate a variable.

# elimination

# end behavior



# end behavior



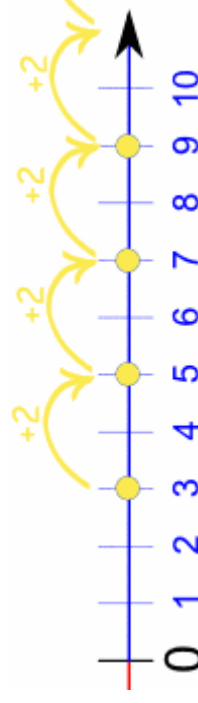
# end behavior

The appearance of a graph as it is followed farther and farther in either direction.



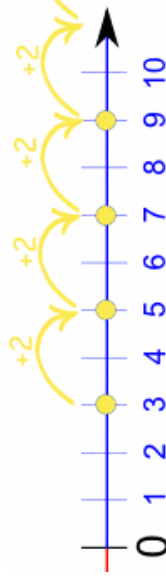
# equal differences

The sequence  $\{3, 5, 7, 9, 11, \dots\}$  is made by adding 2 each time, therefore it has a common or equal difference of 2.



# equal differences

The sequence  $\{3, 5, 7, 9, 11, \dots\}$  is made by adding 2 each time, as so has a common or equal difference of 2.



# equal differences

The common difference between each number in an arithmetic sequence.

# equal factors

A population doubles every year,  $2^n$  where two is the factor and  $n$  represents time in years.

<i>year</i>	<i>population</i>
1	2
2	4
3	8
4	16
5	32

$\times 2$   
 $\times 2$   
 $\times 2$   
 $\times 2$

# equal factors

A population doubles every year,  $2^n$  where two is the factor and  $n$  represents time in years.

<i>year</i>	<i>population</i>
1	2
2	4
3	8
4	16
5	32

$\times 2$   
 $\times 2$   
 $\times 2$   
 $\times 2$

# equal factors

Repeated multiplication by the same number or factor.

# equation

---

## equation

$$9x - 8 = 22 - x$$

## equation

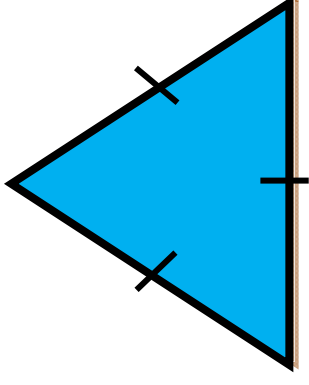
$$9x - 8 = 22 - x$$

A statement that the values of two mathematical expressions are equal (indicated by the sign =).

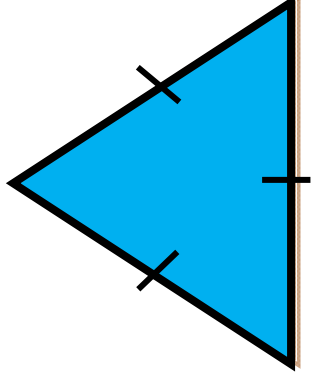
# equilateral triangle

---

## equilateral triangle

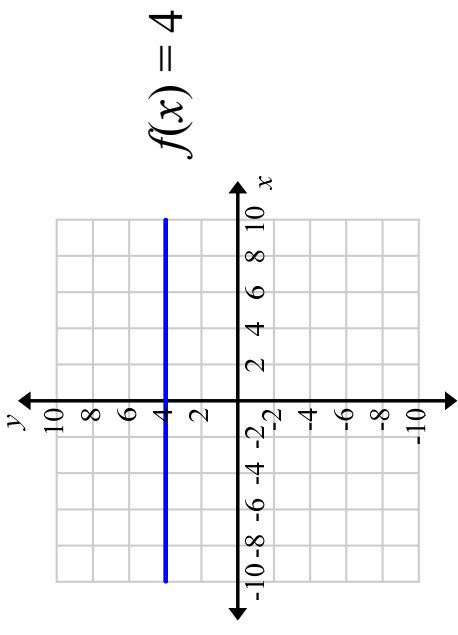


## equilateral triangle

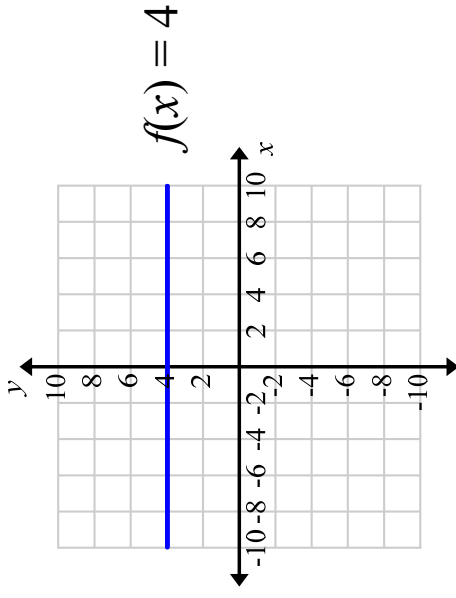


A triangle whose sides  
are all the same length.

# even function



# even function



A function is even if  $f(x) = f(-x)$  for all  $x$  in the domain of the function. Geometrically, the graph of an even function is symmetric with respect to the  $y$ -axis. That means that the graph of the function remains unchanged after reflection about the  $y$ -axis.

# even function

# exponential equation

---

## exponential equation

$$5^x = 125$$

## exponential equation

$$5^x = 125$$

An equation in which a  
variable occurs in the  
exponent.

# explicit formula

---

## explicit formula

Let  $a_n = 2n + 5$  for  
positive integers  $n$ .

If  $n = 7$ , then  
 $a_7 = 2(7) + 5 = 19$ .

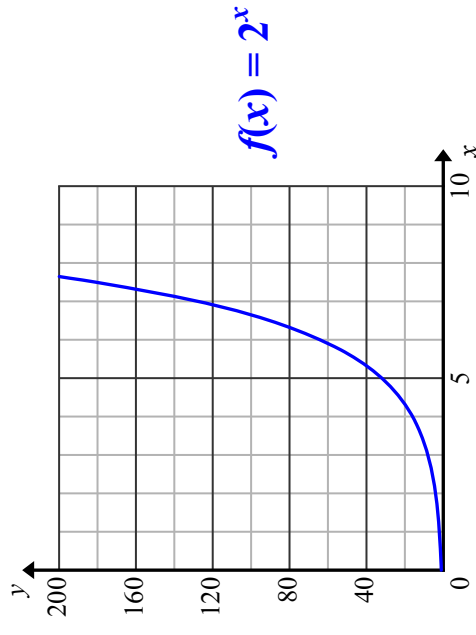
## explicit formula

Let  $a_n = 2n + 5$  for  
positive integers  $n$ .

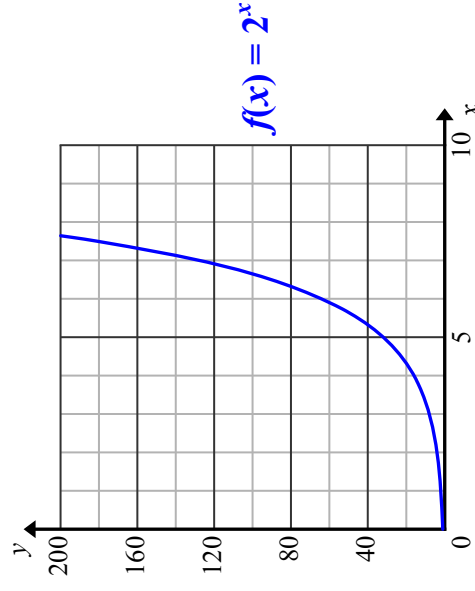
If  $n = 7$ , then  
 $a_7 = 2(7) + 5 = 19$ .

An explicit formula  
expresses the  $n$ th term of  
a sequence in terms of  $n$ .

# exponential function



# exponential function



# exponential function

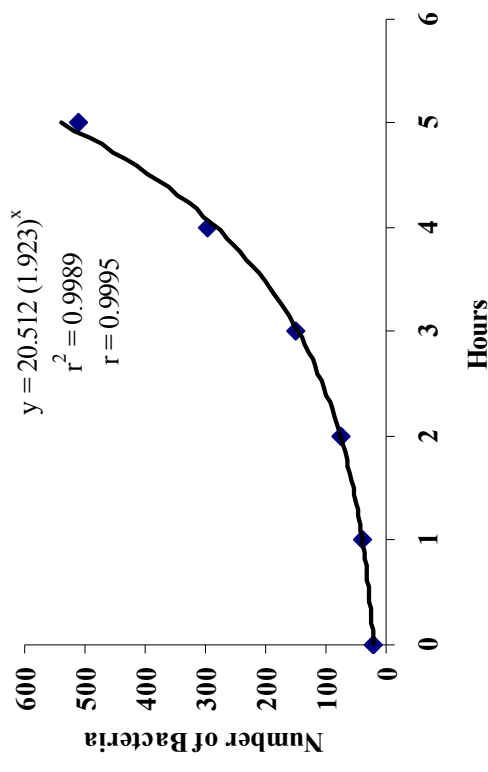
A function that repeatedly multiplies an initial amount by the same positive number. You can model all exponential functions by using  $f(x) = ab^x$ , where  $a$  is a nonzero constant,  $b > 0$  and  $b \neq 1$ .



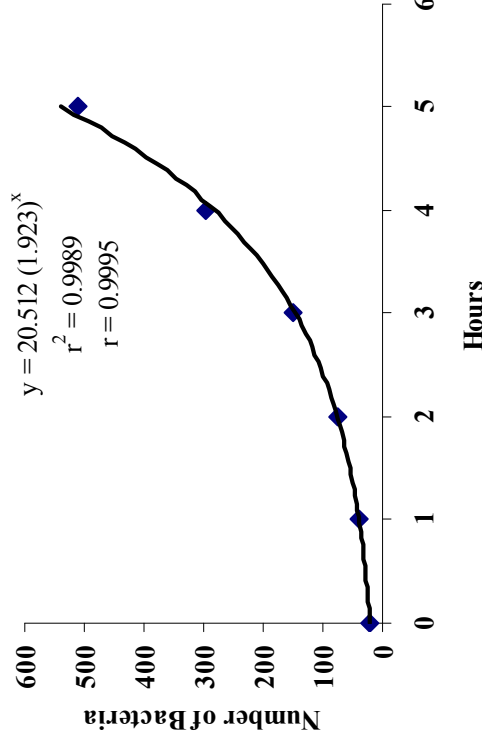
# exponential regression

## model

# exponential regression model



# exponential regression model



A model that shows the relationship between two variables by fitting an exponential function to observed data.

# expression

---

**expression**

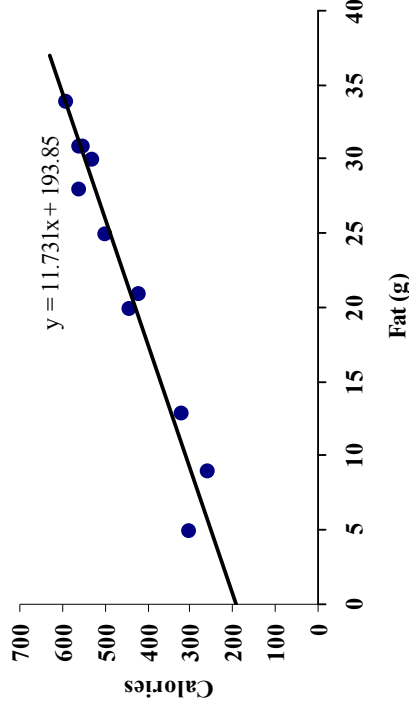
$$5x + 3$$

**expression**

$$5x + 3$$

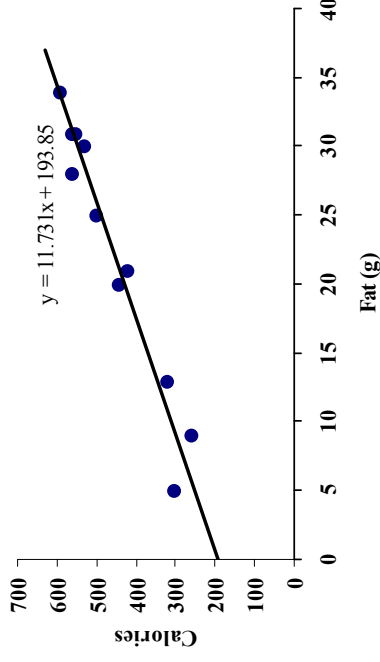
A variable or combination of variables, numbers, and symbols that represents a mathematical relationship.

# extrapolate



*Using your regression equation, find the total calories based upon 40 grams of fat?*

# extrapolate



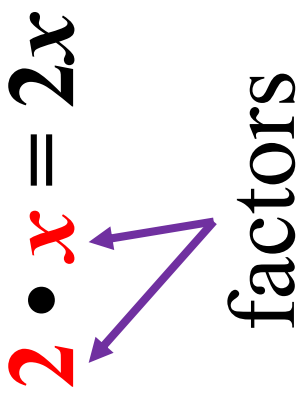
*Using your regression equation, find the total calories based upon 40 grams of fat?*

To estimate or infer a value or quantity beyond the known range of data.

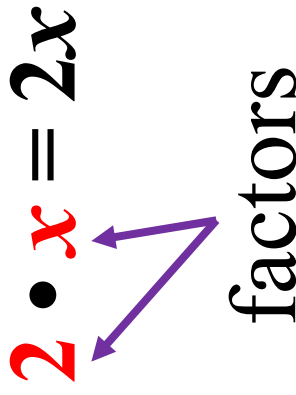
# extrapolate

# factor

# factor

$$2 \cdot x = 2x$$


factors

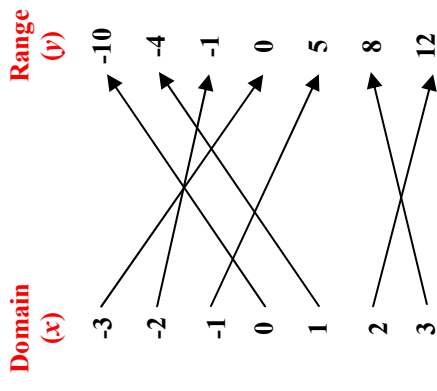
$$2 \cdot x = 2x$$


factors

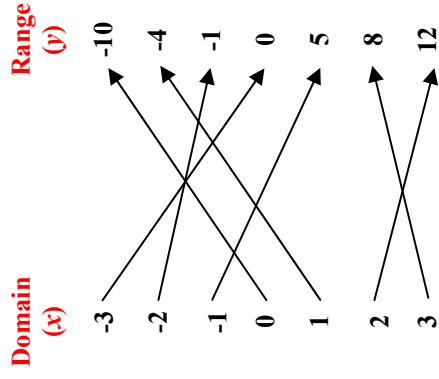
Any of the numbers or symbols in mathematics that when multiplied together form a product.

# factor

# function



# function



A relation that assigns exactly one value in the range to each value in the domain.

# function

# function notation

---

## function notation

$$f(x) = 3x - 8$$

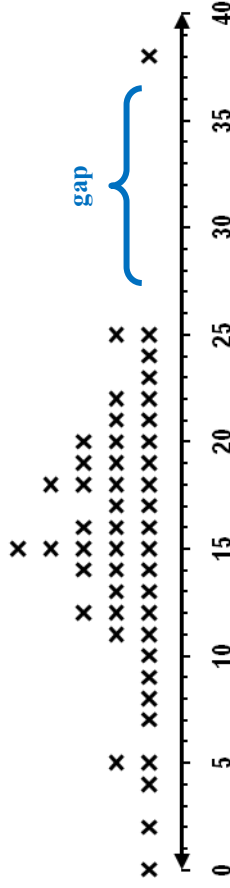
## function notation

$$f(x) = 3x - 8$$

To write a rule in function notation, you use the symbol  $f(x)$  in place of  $y$ .

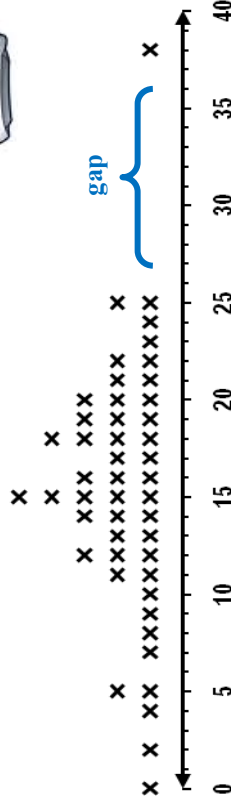
# gap

Hours Watching TV In One Week



# gap

Hours Watching TV In One Week



A place on a graph where no data values are present.

# gap

# geometric

# sequence

# geometric

# sequence

$$a_n = a_1 \cdot r^{n-1}$$

The first term is  $a_1$ , the common ratio is  $r$ , and the number of terms is  $n$ .

**Example:** 2, 6, 18, 54, 162

$$a_1 = 2, r = 3, n = 5$$

The explicit formula is

$$a_n = 2 \cdot 3^{n-1}$$

$$a_n = a_1 \cdot r^{n-1}$$

The first term is  $a_1$ , the common ratio is  $r$ , and the number of terms is  $n$ .

**Example:** 2, 6, 18, 54, 162

$$a_1 = 2, r = 3, n = 5$$

The explicit formula is

$$a_n = 2 \cdot 3^{n-1}$$

# geometric

# sequence

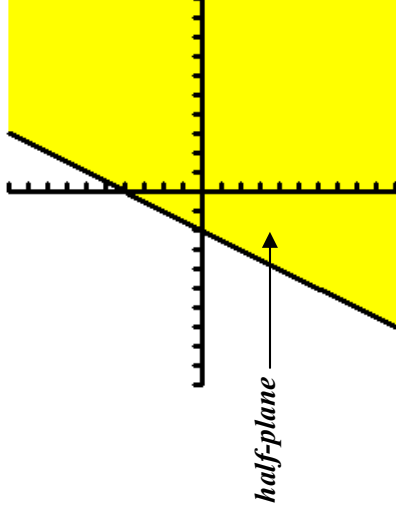
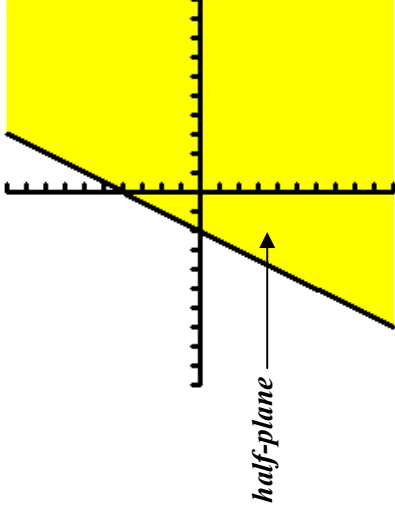
A sequence such as 2, 6, 18, 54, 162 or  $3, 1\frac{1}{3}, \frac{1}{3}, \frac{1}{9}, \frac{1}{27}$  which has a

constant ratio between terms.



# half-plane

# half-plane



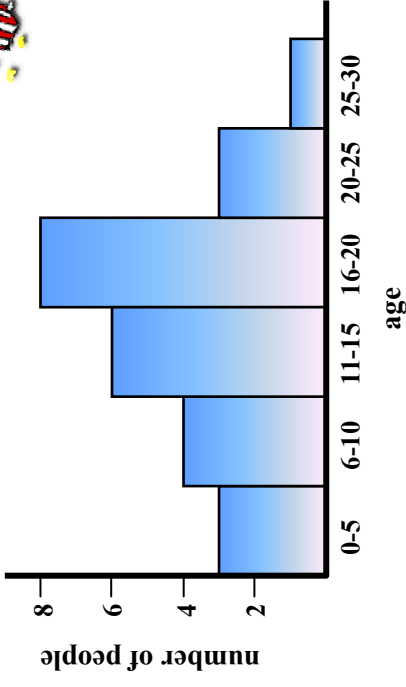
The portion of a plane lying on one side of some line in the plane. The graph of a linear inequality is always a half-plane.

# half-plane

# histogram



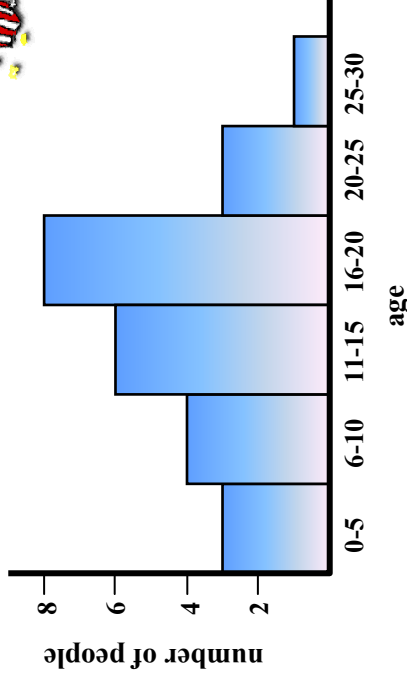
*Ages of People Attending a Movie*



# histogram



*Ages of People Attending a Movie*

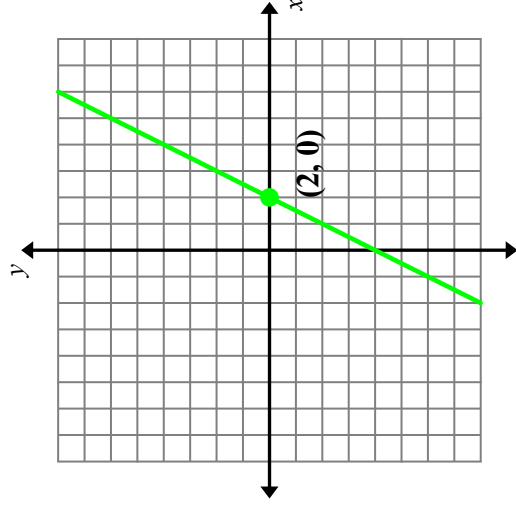


A bar graph in which the labels for the bars are numerical intervals.

# histogram

# horizontal intercept

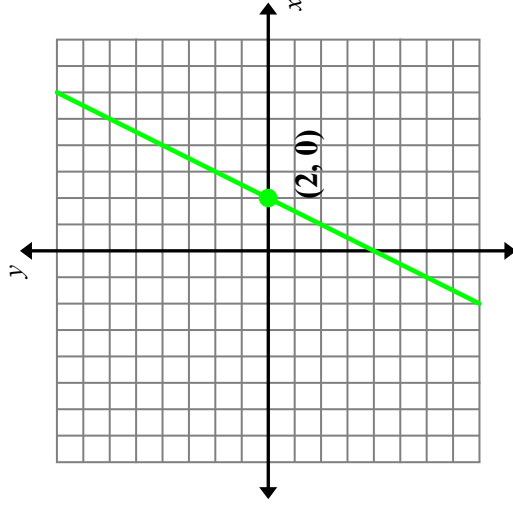
## horizontal intercept



Also known as the  $x$ -intercept. It can be found by substituting “0” for the variable  $y$  in the equation  $y = mx + b$ .

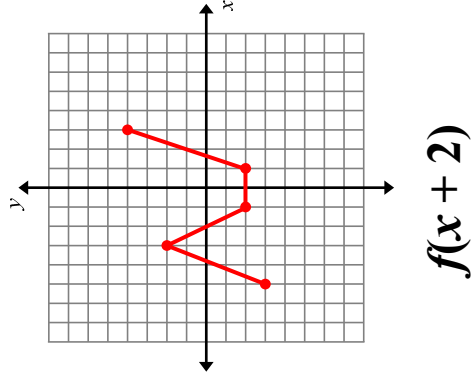
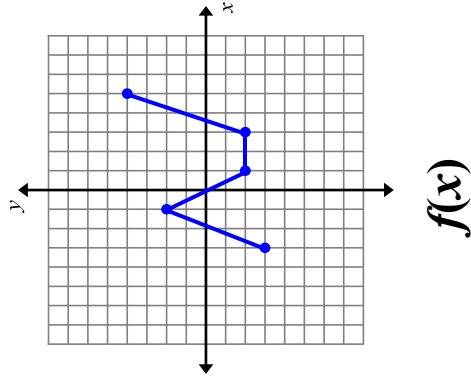
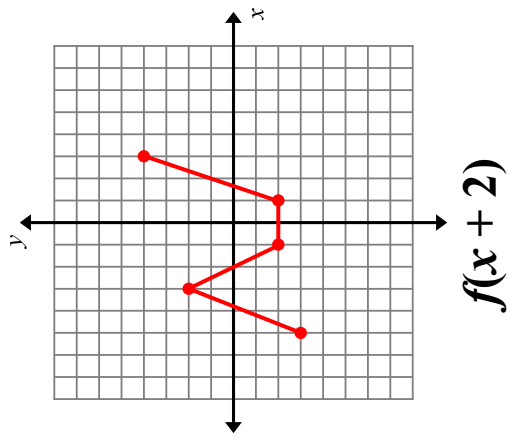
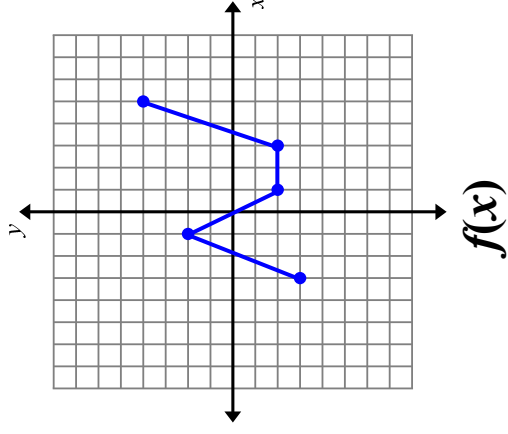
$$0 = m \cdot x + b$$

## horizontal intercept



# horizontal translation

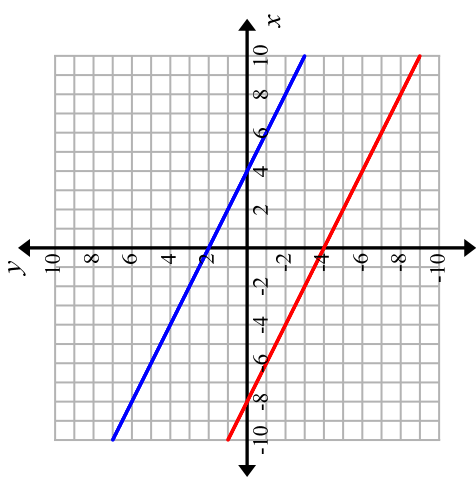
## horizontal translation



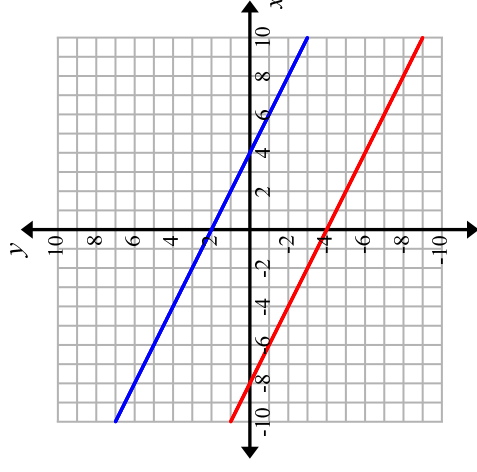
Horizontally translating a graph is equivalent to shifting the parent function left or right in the direction of the  $x$ -axis. A graph is translated  $k$  units horizontally by moving each point on the graph  $k$  units horizontally.

## horizontal translation

# inconsistent system



# inconsistent system

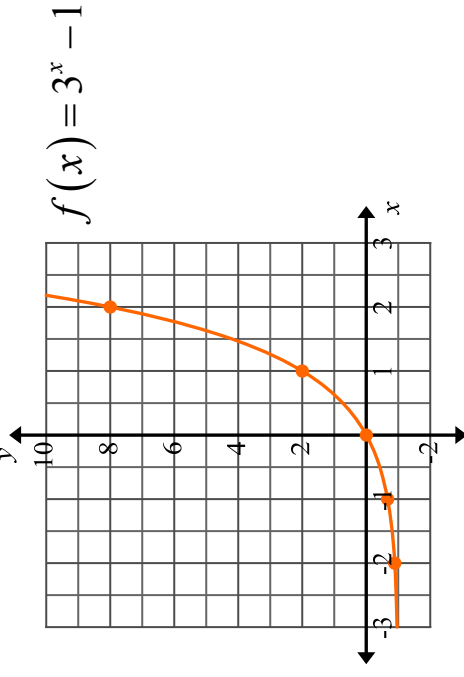
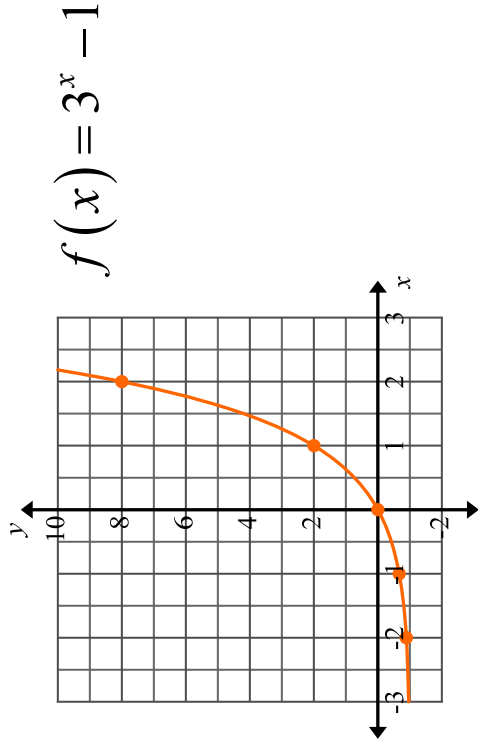


# inconsistent system

A system that has no  
solution.

# increasing exponentially

increasing  
exponentially

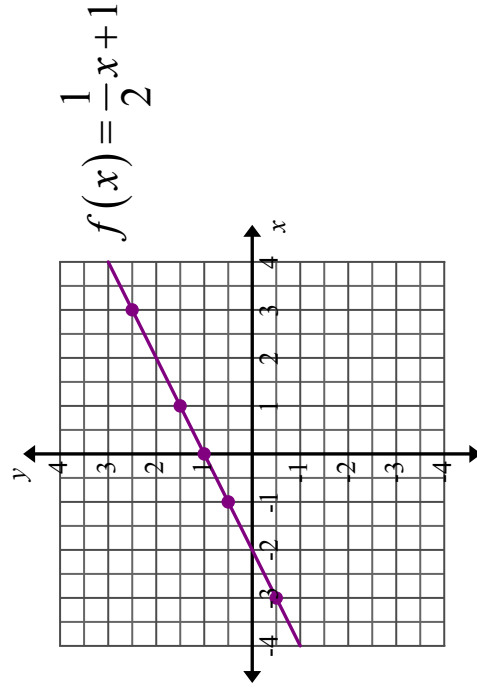
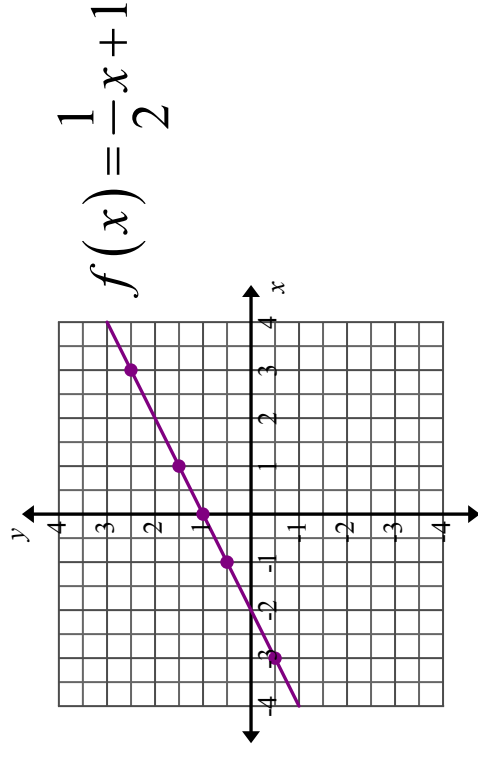


Something is said to increase *exponentially* if its rate of change is expressed using exponents. A graph of such a rate would appear not as a straight line, but as a curve that continually becomes steeper or shallower.

increasing  
exponentially

# increasing linearly

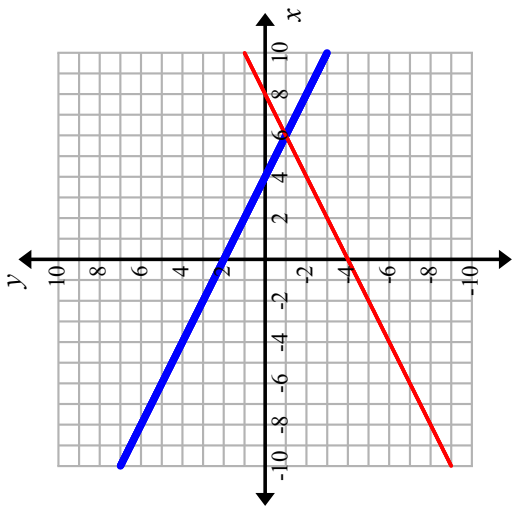
## increasing linearly



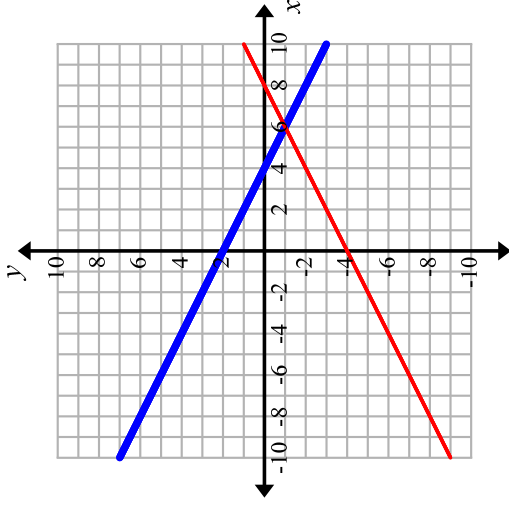
## increasing linearly

A function is said to increase linearly if its rate of change is constant. That is, the change in  $y$  divided by the change in  $x$  is constant for any two points on the function. The graph of such a function would appear as a straight line.

# independent system



# independent system



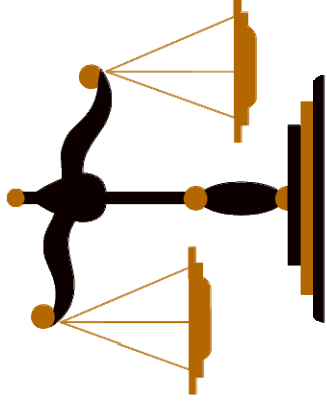
# independent system

A system of linear equations that has a unique solution.



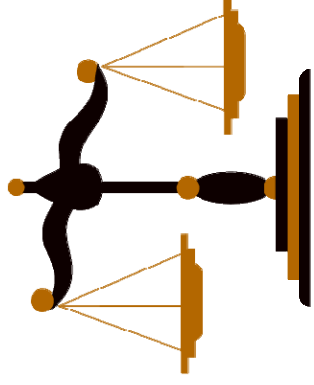
# inequality

$$5x + 6 < 20 - 2x$$



# inequality

$$5x + 6 < 20 - 2x$$

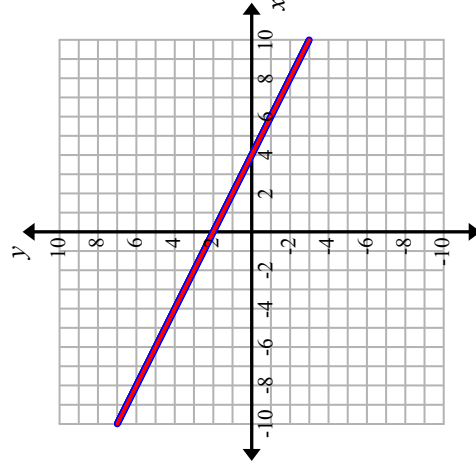
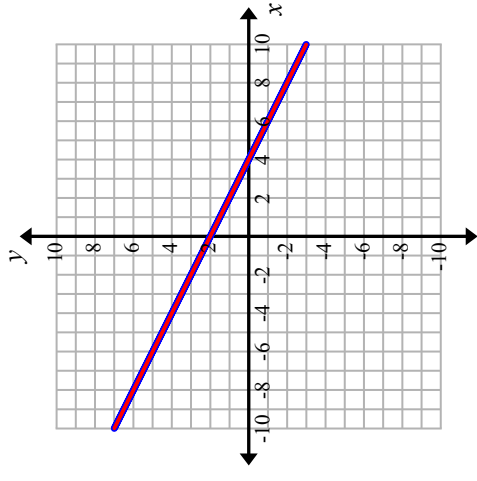


A mathematical sentence that compares two unequal expressions using one of the symbols  $<$ ,  $>$ ,  $\leq$ ,  $\geq$ , or  $\neq$ .

# inequality

**infinitely many  
solutions**

**infinitely many  
solution**



**infinitely many  
solutions**

A system of equations  
that are dependent and  
consistent.

# input

$$f(x) = 2(x + 1) - 7$$

input:  $x = 3$

$$\begin{aligned} f(3) &= 2(3 + 1) - 7 \\ &= 2(4) - 7 \\ &= 8 - 7 \\ &= 1 \end{aligned}$$

# input

$$f(x) = 2(x + 1) - 7$$

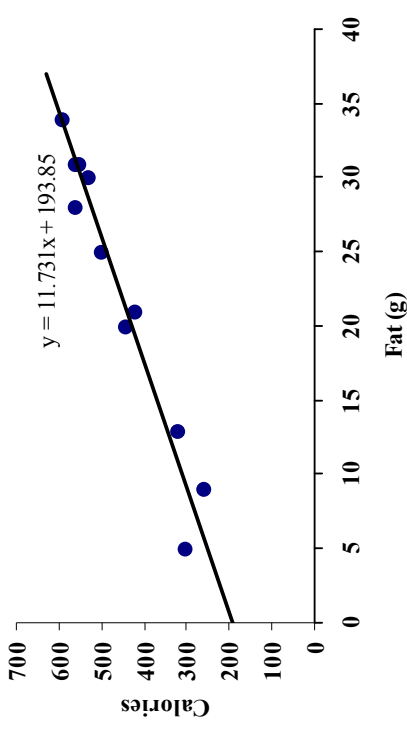
input:  $x = 3$

$$\begin{aligned} f(3) &= 2(3 + 1) - 7 \\ &= 2(4) - 7 \\ &= 8 - 7 \\ &= 1 \end{aligned}$$

A value of the independent variable.

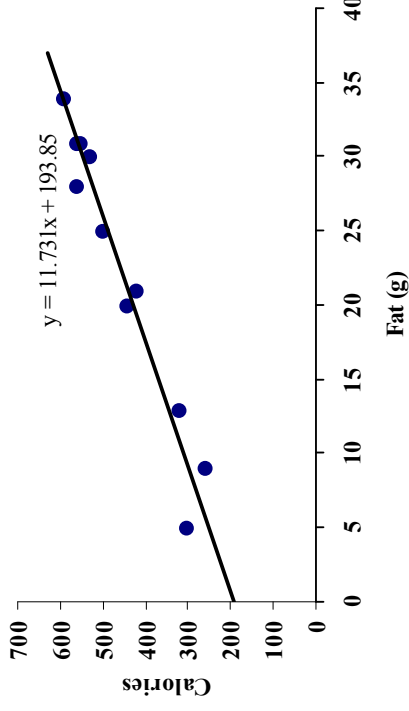
# input

# interpolate



*Using your regression equation, find the total calories based upon 26 grams of fat?*

# interpolate



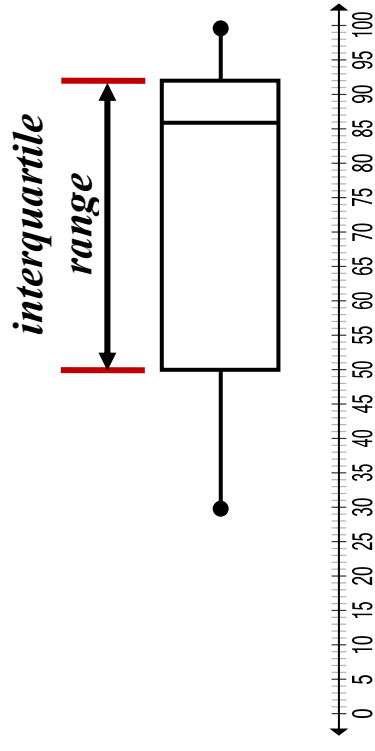
*Using your regression equation, find the total calories based upon 26 grams of fat?*

To estimate or infer a value or quantity that falls within the range of values plotted on the scatter plot.

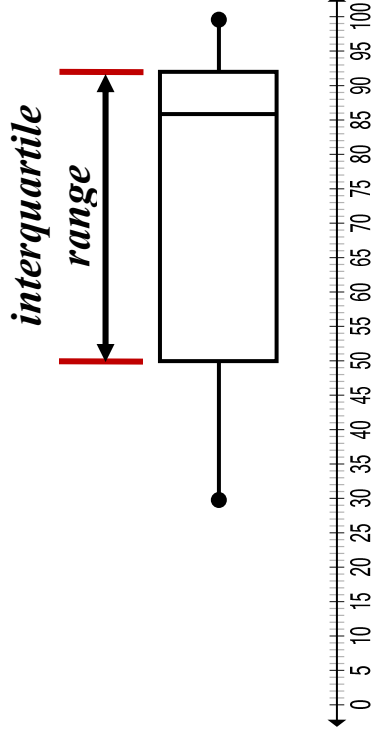
# interpolate

# interquartile range

## interquartile range

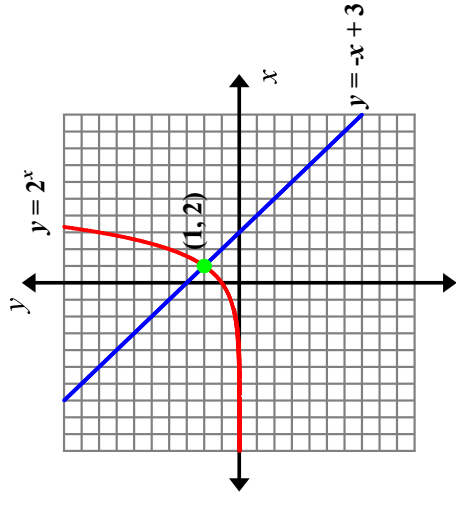


## interquartile range

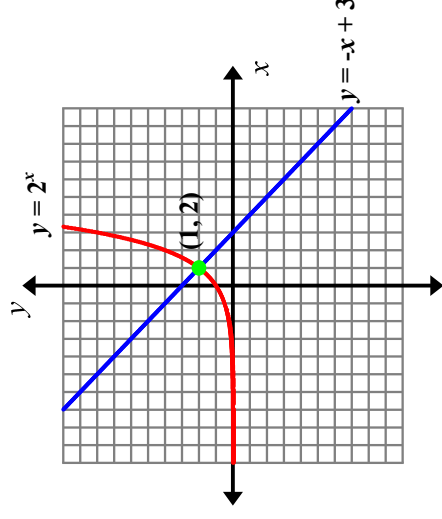


The difference between the upper quartile and the lower quartile.

# intersection



# intersection



# intersection

A point where two or more functions intersect.

# interval

---

- $0 \leq x \leq 1$  is an interval which contains 0 and 1, and all numbers between them
- $(0, 1)$  is an open interval
- $[0, 1]$  is a closed interval

# interval

---

- $0 \leq x \leq 1$  is an interval which contains 0 and 1, and all numbers between them
- $(0, 1)$  is an open interval
- $[0, 1]$  is a closed interval

A set of real numbers with the property that any number that lies between two numbers in the set is also included in the set.

# interval

# interval notation

---

## interval notation

For  $-2 \leq x < 8$ , the  
interval notation is  
 $[-2, 8)$ .

interval  
notation

For  $-2 \leq x < 8$ ,  
the interval  
notation is  
 $[-2, 8)$ .

A notation for describing an interval on a number line. The interval's endpoints(s) are given, and a parenthesis or bracket is used to indicate whether each endpoint is included in the interval.



# joint frequency

## joint frequency

	Dance	Sports	Movies	TOTAL
Women	16	6	8	30
Men	2	10	8	20
TOTAL	18	16	16	50

## joint frequency

	Dance	Sports	Movies	TOTAL
Women	16	6	8	30
Men	2	10	8	20
TOTAL	18	16	16	50

Entries in the body of the table are called *joint frequencies*.

# laws of exponents

---

## laws of exponents

For all real numbers  $x$  and all integers  $m$  and  $n$ ,

$$x^m \cdot x^n = x^{m+n}$$

$$\frac{x^m}{x^n} = x^{m-n}, x \neq 0$$

$$(x^n)^m = x^{nm}$$

$$(xy)^n = x^n y^n$$

## laws of exponents

For all real numbers  $x$  and all integers  $m$  and  $n$ ,

$$x^m \cdot x^n = x^{m+n}$$

$$\frac{x^m}{x^n} = x^{m-n}, x \neq 0$$

$$(x^n)^m = x^{nm}$$

$$(xy)^n = x^n y^n$$

The theorem stating the elementary properties of exponents.

# line

---

# line

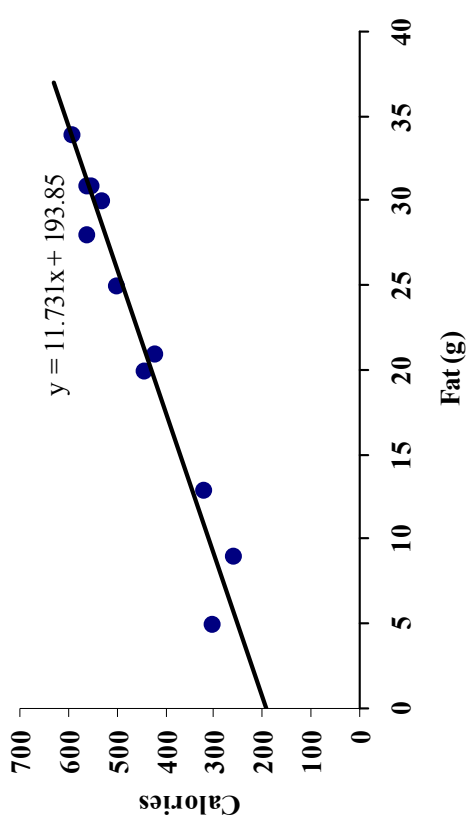


A line is the straight path connecting two points and extending beyond the points in both directions.

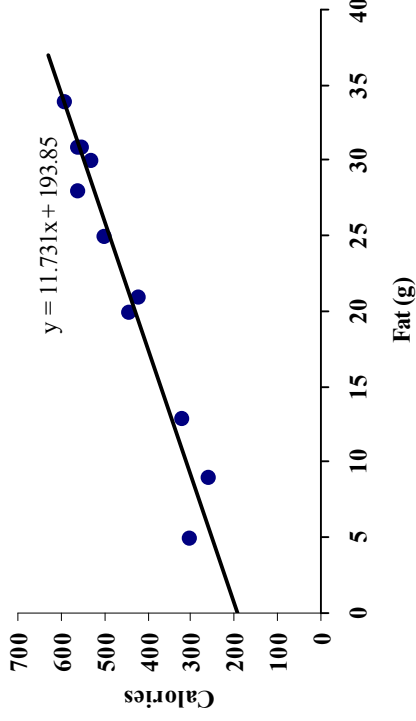
# line

# line of best fit

## line of best fit



## line of best fit

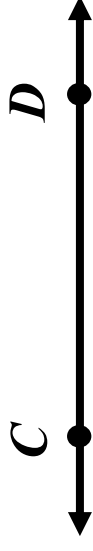


A line of best fit (or “trend” line) is a straight line that best represents the data on a scatter plot. This line may pass through some of the points, none of the points, or all of the points.

# line segment

---

## line segment



## line segment

A line segment is a part of a line that is bounded by two end points, and contains every point on the line between its end points.

# linear equation

---

## linear equation

$$2(x - 5) = 3x + 4$$

## linear equation

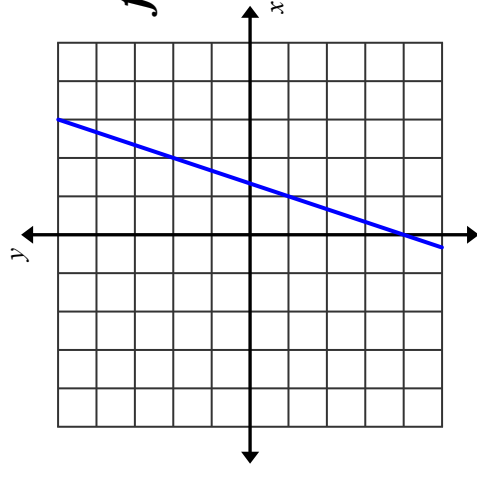
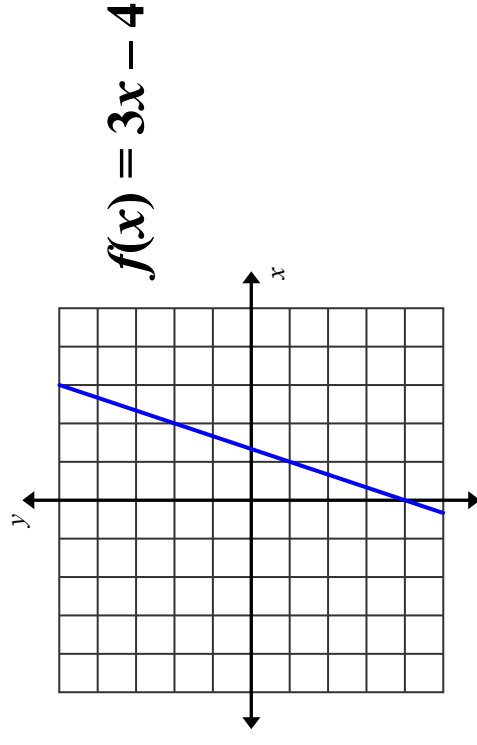
$$2(x - 5) = 3x + 4$$

An algebraic equation in which each term is either a constant or the product of a constant and (the first power of) a single variable.

# linear function

---

## linear function



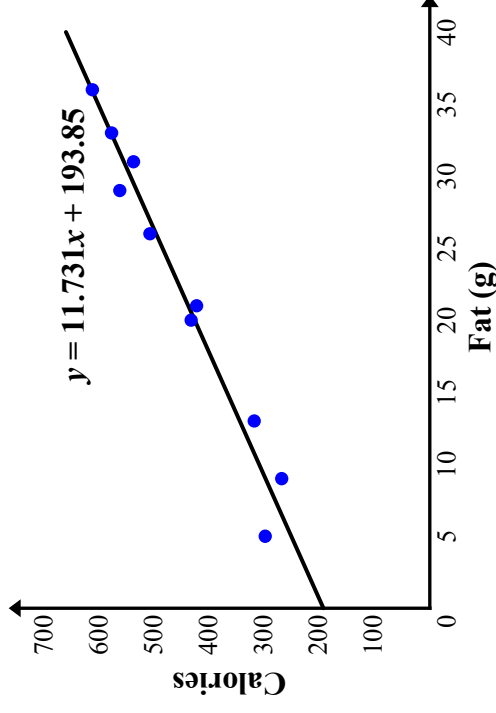
## linear function

$$f(x) = 3x - 4$$

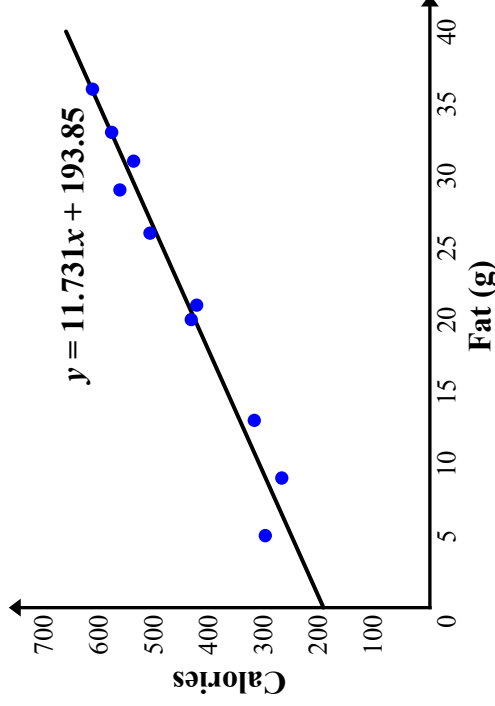
Functions that are a first-degree polynomial of one variable. The graph of the function is a line.

# linear regression model

## linear regression model



## linear regression model



A model that shows the relationship between two variables by fitting a linear function to observed data.



