

# Math at Work .11: Glossary/Credits

February 20, 2012, 15:57

# Glossary

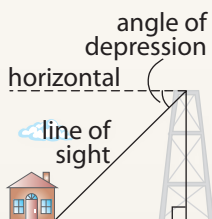
## A

### *account*

A place at a financial institution to hold your money.

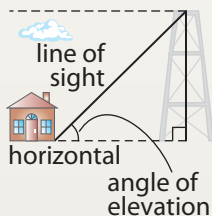
### *angle of depression*

An angle formed by the horizontal and a line of sight below the horizontal line.



### *angle of elevation*

An angle formed by the horizontal and a line of sight above the horizontal line.



### *ATM*

A machine people use to perform routine banking transactions; stands for *automated teller machine*.

### *average*

The sum of all values in a data set divided by the number of values in the data set.

## B

### *balance*

In relation to banking, the total amount of money in a bank account at a given point in time.

### *balanced budget*

A budget in which the total income equals the total expenses.

### *bank statement*

A record of all the transactions in an account over a period of time, usually one month.

### *budget*

An organized plan for income and spending.

## C

### *capacity*

The greatest amount that a container can hold. It is measured in cubic units or units<sup>3</sup>.

### *complementary angles*

Two angles that add to 90° and form a right angle.

### *composite figure*

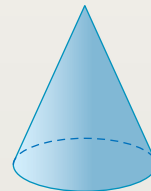
A 3-D figure made up of two or more regular figures.

### *compound interest*

Interest that is earned on the original investment plus the interest earned during the previous calculation periods.

### *cone*

A 3-D figure with a circular base and a curved surface that runs from the base to the highest point.

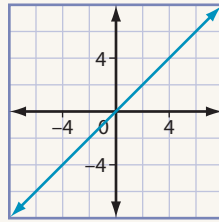


### *constant*

A value that is always the same.

*continuous*

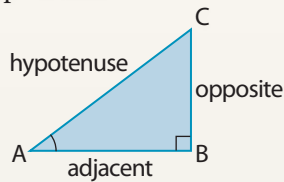
Data values on a graph that are connected. For continuous data, the top end of one interval needs to be the bottom end of the next interval.



*cosine ratio*

The ratio of the length of the adjacent side to the length of the hypotenuse for an angle in a right triangle.

$$\cos A = \frac{\text{adjacent}}{\text{hypotenuse}}$$



*credit*

In relation to banking, an amount of money added to a bank account.

*cylinder*

A 3-D object with two circular faces that are the same size and a curved surface.



**D**

*debit*

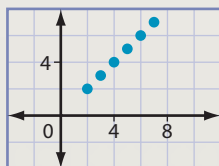
In relation to banking, an amount of money subtracted from a bank account.

*diameter*

The distance across a circle through its centre.

*discrete*

Data values that are distinct and can be counted; data values that fall into categories.



**E**

*exploded view diagram*

A drawing that shows the components of an object with the parts slightly separated. It is often used to show the sequence of steps for building an object.

*extrapolate*

An estimate of a value that falls outside a known range or graph of values. For example, if the trend continues, what will the next values on the graph likely be?

**F**

*fixed expenses*

Expenses that are unlikely to change from month to month.

*fixed term investments*

Require investors to keep money invested for a specific period of time.

*frequency*

Number of values in each category in a table of values. Record each response using a tally mark. Count the number of tally marks to find the frequency.

*future value*

The value of an investment at the end of a certain time period; also called *final amount, A*.

**G**

*grade*

The slope of a road or railway track, usually expressed as a percent.

*gross pay*

The total amount that an employee earns, before taxes are deducted.

*Guaranteed Investment Certificate (GIC)*

An investment that is very low risk because it is guaranteed by the bank.

## H

### *histogram*

A type of bar graph that shows the number of times data appear within a certain range. It uses vertical bars without any gaps between them.

## I

### *incentives*

In relation to banking, anything that financial institutions offer to customers to make doing business with that institution seem more attractive.

### *interest*

A fee paid for borrowing someone else's money.

### *interpolate*

An estimate of a value that falls within a known range or graph of values.

### *isometric drawing*

A view of a 3-D object in which all horizontal edges of the object are drawn at a 30° angle, all vertical edges of the object are drawn vertically, and all lines are drawn to scale.

## L

### *line of credit*

An arrangement between a financial institution and a customer for a maximum amount that can be borrowed at any time.

## M

### *median*

The middle number in a data set after the data has been arranged in order.

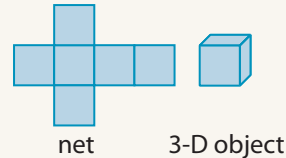
### *mutual fund*

A collection of stocks and/or bonds that allows investors to pool their money.

## N

### *net*

A 2-D diagram that can be folded to create a 3-D object.



### *net pay*

The total amount that the employee gets to take home, after taxes are deducted.

## O

### *one-point perspective drawing*

A drawing in which it looks like objects in the background join at a vanishing point in the distance.

### *orthographic drawing*

A drawing that shows 2-D views of a 3-D object. It often includes a front view, a top view, and a side view of the object.

### *overdraft protection*

A service that financial institutions may offer to temporarily cover a customer's next few purchases if the amount of money in the customer's account falls to \$0.00.

## P

### *PIN*

A pass code selected by the user of a bank card to gain access to the user's bank accounts; stands for *personal identification number*.

### *personal loan*

A loan that is given for personal use.

### *point of perspective*

The position from which an object is being viewed.

*present value*

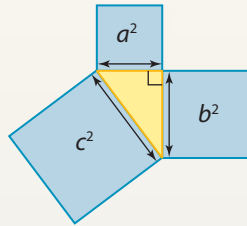
The amount of money that is invested; also called *principal*, *P*.

*primary trigonometric ratios*

The three ratios defined in a right triangle: sine, cosine, and tangent.

*Pythagorean relationship*

The relationship between the lengths of the sides of a right triangle. The sum of the areas of the squares attached to the legs of a right triangle equals the area of the square attached to the hypotenuse. In the diagram,  $a^2 + b^2 = c^2$



**R**

*radius*

The distance from the centre of a circle to a point on the circumference. The radius is half the diameter.

*rate of change*

A change in one quantity relative to a change in another quantity.

*rectangular prism*

A 3-D figure with two rectangular bases that are the same size and shape.



*return*

The profit on an investment.

*rise*

The vertical distance between two points on a line. See *slope*.

*run*

The horizontal distance between two points on a line. See *slope*.

**S**

*scale*

The relationship between a distance on a drawing, model, or map and the actual distance. For example, a scale of 1 cm : 1 m means that 1 cm on the drawing represents 1 m in actual size.

*scale drawing*

A 2-D drawing used to represent a place or object. It uses scale to show the relationship between the distance on a drawing and the distance in real life.

*service charges*

Costs charged by financial institutions for providing services, such as banking by telephone or over the Internet, and using banking machines.

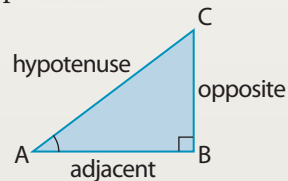
*simple interest*

Interest that is paid once, generally at the end of the time period of the investment.

*sine ratio*

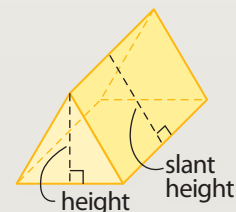
The ratio of the length of the opposite side to the length of the hypotenuse for an angle in a right triangle.

$$\sin A = \frac{\text{opposite}}{\text{hypotenuse}}$$



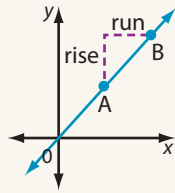
*slant height*

The shortest distance from the edge of the base of a 3-D figure to its highest point.



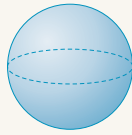
### slope

A measure of the steepness of a line. It is the ratio of the rise to the run of a line or line segment.



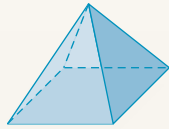
### sphere

A round, ball-shaped figure.



### square-based pyramid

A 3-D figure with a square base and four triangular sides that connect at one point.



### surface area

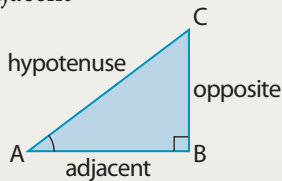
The sum of the areas of all the faces of a 3-D object. It is measured in square units or units<sup>2</sup>.

## T

### tangent ratio

The ratio of the length of the opposite side to the length of the adjacent side for an angle in a right triangle.

$$\tan A = \frac{\text{opposite}}{\text{adjacent}}$$



### term deposit

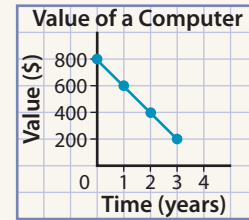
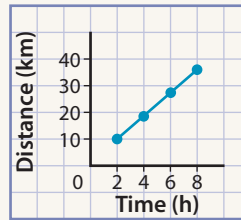
An amount of money deposited for a fixed length of time.

### transaction

A transfer of money, such as a deposit into or a withdrawal from a bank account.

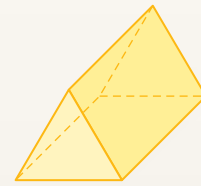
### trend

The general direction in which values in a data set tend to move. Trends are either upward (positive) or downward (negative).



### triangular prism

A 3-D figure with only two triangular faces that are the same size and shape.



## U

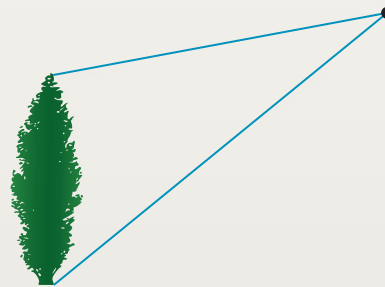
### utilities

Basic household services, such as heat, electricity, and water.

## V

### vanishing point

A point toward which parallel lines appear to join in the distance.



### variable expenses

Expenses that are likely to change from month to month.

### volume

The amount of space an object occupies. It is measured in cubic units or units<sup>3</sup>.

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