Microsoft Press®

Computer Dictionary

Copyright © 1997 by Microsoft Corporation

Macintosh, Power Macintosh, QuickTime, and TrueType fonts are registered trademarks of Apple Computer, Inc. Intel is a registered trademark of Intel Corporation. DirectInput, DirectX, Microsoft, Microsoft Press, MS-DOS, Visual Basic, Visual C++, Win32, Win32s, Windows, Windows NT, and XENIX are registered trademarks and ActiveMovie, ActiveX, and Visual J++ are trademarks of Microsoft Corporation. Java is a trademark of Sun Microsystems, Inc. Other product and company names mentioned herein may be the trademarks of their respective owners.

Acquisitions Editor: Kim Fryer
Project Editors: Maureen Williams Zimmerman, Anne Taussig
Technical Editors: Dail Magee Jr., Gary Nelson, Jean Ross, Jim Fuchs, John Conrow,
                  Kurt Meyer, Robert Lyon, Roslyn Lutsch

arithmetic expression \âr`ith-met`ik eks-presh´-ən\ *n.* A series of elements, including data labels and constants as well as numbers, that are joined by arithmetic operators, such as + and −, and can be calculated to produce a value.

arithmetic logic unit \âr-ith-met`ik loj´ik yo͞o`nit\ *n.* A component of a microprocessor chip used for arithmetic, comparative, and logical functions. *Acronym:* ALU (A`L-U´). *See also* gate (definition 1).

arithmetic operation \ə-rith´mə-tik op-ər-ā´shən, âr-ith-met`ik\ *n.* Any of the standard calculations performed in arithmetic—addition, subtraction, multiplication, or division. The term is also used in reference to negative numbers and absolute values.

arithmetic operator \âr-ith-met`ik op´ər-ā-tər\ *n.* An operator that performs an arithmetic operation: +, −, ×, or /. An arithmetic operator usually takes one or two arguments. *See also* argument, binary, logical operator, operator (definition 1), unary.

.arj \dot`A-R-J´\ *n.* The DOS file extension used with archive files created with the ARJ compression program.

.army.mil \dot-är´mē-dot-mil´, dot-är´mē-dot-M-I-L´\ *n.* On the Internet, the major geographic domain specifying that an address belongs to the United States Army.

ARP \A`R-P´, arp\ *n.* Acronym for **A**ddress **R**esolution **P**rotocol. A TCP/IP protocol for determining the hardware address (or physical address) of a node on a local area network connected to the Internet, when only the IP address (or logical address) is known. An ARP request is sent to the network, and the node that has the IP address responds with its hardware address. Although ARP technically refers only to finding the hardware address, and RARP (for Reversed ARP) refers to the reverse procedure, ARP is commonly used for both senses. *See also* IP address, TCP/IP.

ARPANET \är´pə-net`, A`R-P`A-N`E-T´\ *n.* A large wide area network created in the 1960s by the U.S. Department of Defense Advanced Research Projects Agency (ARPA, renamed DARPA in the 1970s) for the free exchange of information between universities and research organizations, although the military also used this network for communications. In the 1980s MILNET, a separate network, was spun off from ARPANET for use by the military. ARPANET was the network from which the Internet evolved. *See also* Internet, MILNET.

ARP request \ärp´ rə-kwest`, A-R-P´\ *n.* Short for **A**ddress **R**esolution **P**rotocol **request**. An ARP packet containing the Internet address of a host computer. The receiving computer responds with or passes along the corresponding Ethernet address. *See also* ARP, Ethernet, IP address, packet.

array \ər-ā´\ *n.* In programming, a list of data values, all of the same type, any element of which can be referenced by an expression consisting of the array name followed by an indexing expression. Arrays are part of the fundamentals of data structures, which, in turn, are a major fundamental of computer programming. *See also* array element, index, record[1], vector.

array element \ər-ā´ el`ə-mənt\ *n.* A data value in an array.

array processor \ər-ā´ pros`e-sər\ *n.* A group of interconnected, identical processors operating synchronously, often under the control of a central processor.

arrow key \âr´ō kē`\ *n.* Any of four keys labeled with arrows pointing up, down, left, and right, used to move the cursor vertically or horizontally on the display screen or, in some programs, to extend the highlight. See the illustration.

Arrow keys
(when Num Lock is off)
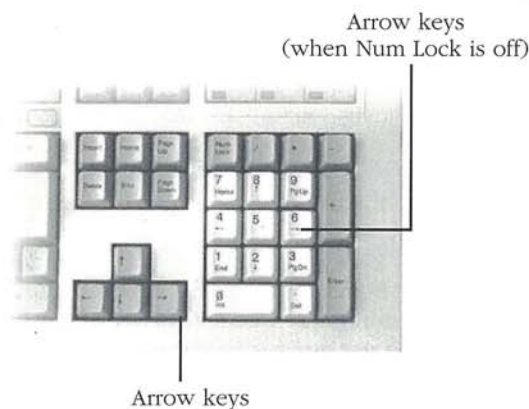
Arrow keys

Arrow key. *When Num Lock is off, the arrow keys on the number keypad can be used.*

article \är´tə-kəl\ *n.* A message that appears in an Internet newsgroup. *Also called* post. *See also* newsgroup.