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SHUFFLE THOSE DIGITS We give you 399 a numbers game to play around with

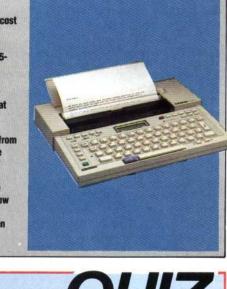
**PRIMITIVE PARTS** Good programming benefits from the use of algorithms

#### MACHINE CODE

WINDOW DISPLAY A program that allows windows on the Spectrum screen

PROFILE

**GLOBAL ENTERPRISE** The Sharp Corporation has a remarkable sales record



1) What is the difference between source code and object code?

2) How many pixels can be represented in one byte in mode 5 on the BBC micro, and why?

3) To write a program in BASIC on the Coleco Adam, what must the user do after switching on the machine?

4) What is the name of the company you work for when playing Jet Pac?

#### Answers To Last Week's Quiz

A1) Bi-directional printing means printing alternate lines right to left and left to right. Therefore, the printer does not waste time in carriage returns.

A2) A BCC instruction checks to see if the carry flag is set to 1 or 0. If it is 1, the program will perform an addition; if not, it will skip the addition and go on to the rotation operations.

A3) To allow the BBC to run a CP/M-style disk operating system.

A4) Gridrunner is marketed by Salamander under licence from Llamasoft



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The Brother EP44 is a low cost computer printer that can also be used as a word processor - thanks to its 15character display, memory and software - and as a terminal to work with larger computers. We take a look at this sophisticated machine.

 Trying to create graphics from **BASIC** can be hard work. We test four 'digital tracers', machines that copy the movement of a pen onto the computer screen. These allow maps or other printed graphics to be copied, or can create new graphics.