

PROGRAMMING A COMPUTER

Architects in the information age

The use of computers as drawing machines is now familiar to many architects and software for building design is becoming increasingly popular: in a process known as computer-aided-design (CAD), engineers and architects are using computers to see their ideas take form before their eyes: they can put the project for a building into the computer and then “walk around” the plan, moving closer in or farther-out, allowing the client to see and use a building before construction even starts. The computer can be programmed to alter the entire design or to accommodate specific changes and to evaluate possible costs and energy consumption. It also permits the architect to see how the new structure will fit into the existing surrounding.

The computer-generated image is made up of tiny picture elements called *pixels*, arranged on the video screen in rows and columns like mosaic tiles. Pixels are all the same shape, and each is assigned one of a small number of predetermined colours; the more dense the concentration of pixels, the greater the clarity of the image.

1. Read the following sentences and decide whether they are true or false.

	True	False
1 The introduction of computers into the architectural practice has deeply changed the way of working of architects and engineers.	<input type="checkbox"/>	<input type="checkbox"/>
2 With CAD systems, building plans can be visualized and modified.	<input type="checkbox"/>	<input type="checkbox"/>
3 CAD allows clients to see the project of a building come real.	<input type="checkbox"/>	<input type="checkbox"/>
4 Evaluation of costs cannot be performed with CAD systems.	<input type="checkbox"/>	<input type="checkbox"/>
5 The clarity of the image obtained by the computer depends on the concentration of pixels.	<input type="checkbox"/>	<input type="checkbox"/>

2. Choose the right meaning.

1 **drawing machines** means:

- a different models of computer
- b machines drawn with the help of a computer
- c devices which are used for drawing

2 **energy consumption** means:

- a the production of energy
- b the amount of necessary energy
- c the dispersion of energy

3 **farther-out** means:

- a to a greater distance
- b impossible to reach
- c the most distant

4 **surrounding** means:

- a a given place or environment
- b about
- c encircling

3. Find verbs in the text with an opposite meaning to those listed below.

- 1 ignored
.....
- 2 disintegrate
.....
- 3 take out
.....
- 4 finishes
.....
- 5 forbids
.....