Types of data

Working vocabulary

computation – вычисления
arithmetic operations – арифметическая операция
logical operation – логическая операция
subtraction – вычитание
to benefit – получать пользу　　　to compute - вычислять
equal – равный　　　　　　to divide – делить
to determine – определять　　　data – данные
to compare – сравнивать　　　save – спасать (здесь экономить)
comparison – сравнение　　　decimal point – десятичная точка
value – величина　　　　increase – увеличивать
tool – инструмент　　　　addition – сложение
to expand – расширять　　　false – ложный
microwave oven – микроволновая печь sequence – последовательность
embedded – встроенный　　　advent – приход
accept – принимать　　　flexible – гибкий, изменчивый

Read and translate the text.

Types of data

With the advent of new computer applications and hardware, the definition of data has expanded to include many types.

Numeric data consists of numbers and decimal points, as well as the plus (+) and minus (-) signs. Both arithmetic operations and logical operations are performed on numeric data. This means that numbers can be used for calculations as well as sorted and compared to each other.

Text, or textual data, can contain any combination of letters, numbers and special characters. Sometimes textual data is known as alphanumeric data.

Various forms of data that we can hear and see makes up audio-visual data. The computer can produce sounds, music and even human voice. It can also accept audio information as an input. Data can also take form of drawings and video sequences.

Physical data is captured from the environment. For example, light, temperature and pressure are all types of physical data.

In many large buildings, computer systems process several kinds of physical data to regulate operations. Computers can set off security alarms, control temperature and humidity, or turn lights on and off, all in response to physical data. These applications increase people's safety and save the time and money.

Exercise 2. Ответьте на вопросы к тексту.
1) In what two major parts could be computer operations divided?
2) What are arithmetic operations?
3) What are logical operations?
4) Can computer compare two graphical objects?
5) What makes computer so different from other tools?
6) What is embedded computer? What modern devices have embedded computers?

Exercise 3. Заполните пропуски словами из текста.
1) ... are computations with numbers such as addition, subtraction, and other mathematical procedures.
2) The computer's ability to compare two values to determine if one is larger than, smaller than, or equal to the other is called a ...
1) New tools ranging from typewriters to microwave ovens have embedded computers, or ... computers
2) An ... can accept data to use several options in its program, but the program itself cannot be changed.
3) ... can be used for calculations as well as sorted and compared to each other.
4) ... can contain any combination of letters, numbers and special characters.

Exercise 4. Дайте определения следующим терминам.
- Numeric data
- Textual data
- Physical data
- Audio-visual data

Thank you for your attention.