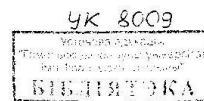


Министерство образования Республики Беларусь  
Учреждение образования  
«Гомельский государственный университет  
имени Франциска Скорины»

Кафедра английского языка

Практическое пособие  
по чтению для студентов  
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РЕПОЗИТОРИЙ ГГУ И

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Пособие состоит из 7 уроков и направлено на повышение эффективности самостоятельной работы студентов. Материал для чтения взят из Интернета и с олимпиады по программированию 2001 – 2002 г.г. среди студентов. В пособие включены практические задания, выполняемые при помощи компьютера.

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**Unit 1**

I. Read the list of words and memorise it.

Chip – чип, микросхема  
wrist – запястье  
to release – выпускать (новую продукцию)  
to develop – разрабатывать  
to surf the Internet – “бродить” по интернету  
to follow the stockmarket – следить за уровнем цен на бирже  
to download – загружать, “скачивать”  
bank account – банковский счет  
neural network – нейронная сеть  
Silicon Valley – Силиконовая Долина (центр компьютерной индустрии, расположенный в районе Сан-Франциско, Калифорния).

II. Read the following text and catch the main idea.

50 YEARS AGO, people hadn't even heard of computers, and today we cannot imagine life without them.

Computer technology is the fastest-growing industry in the world. The first computer was the size of a minibus and weighed a ton. Today, its job can be done by a chip the size of a pin head. And the revolution is still going on.

Very soon we'll have computers that we'll wear on our wrists or even in our glasses and earrings. Such wearable computers are being developed in the USA.

Japan's biggest mobile-phone company has just released its cleverest product so far, the i-mode, a mobile phone that allows you to surf the Internet as well as make calls. People are already using the phone to check the news headlines,

follow the stockmarket and download the latest jokes. Soon they will be able to buy cinema tickets and manage their bank accounts.

The next generation of computers will be able to talk and even think for themselves. They will contain electronic 'neural networks'. Of course, they'll be still a lot simpler than human brains, but it will be a great step forward. Such computers will help to diagnose illnesses, find minerals, understand and control the world's money markets, identify criminals and control space travel.

Computer revolution is changing our life and our language, too. We are constantly making up new words or giving new meanings to old ones. Most of computer terms are born in Silicon Valley, the world's top computer-science centre.

III. Choose an answer – a or b.

1. A **mouse** is
  - a) a small furry animal with a long tail
  - b) a small box used to operate a computer
2. **To surf** is
  - a) to ride on board of the waves of the sea
  - b) to move around the Internet
3. A **bug** is
  - a) a small insect
  - b) an error in a computer programme
4. A **flame** is
  - a) a red or yellow burning gas seen when something is on fire
  - b) an unfriendly or rude e-mail
5. **To boot** is
  - a) to kick
  - b) to start a computer

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6. A **geek** is
  - a) someone who bites the heads off alive chickens as part of a show
  - b) a person who knows everything about computers

IV. Choose an answer – a, b or c.

1. What do you use a modem for?
  - a) to print a document
  - b) to play music on your computer
  - c) to send messages along a telephone line
2. What do you use when you want to look for sites on the world wide web?
  - a) a browser
  - b) a CD ROM
  - c) a printer
3. What can you use the Internet for?
  - a) to delete a file from your computer
  - b) to help you find information and communicate with people
  - c) to make your computer work faster
4. What do you use a scanner for?
  - a) to transfer photos and texts to your computer
  - b) to find certain files on the Internet
  - c) to clean your computer
5. How much is a gigabyte?
  - a) 1,000 megabytes
  - b) 100 megabytes
  - c) 1000 bytes

V. Match the words (or phrases) to the definitions.

1. chat room
2. e-commerce
3. joystick

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4. cyberspace
5. desktop
6. multitasking
- a) the ability of a computer to run several programmes at once
- b) the screen you see after you've switched your computer
- c) an area on the Internet where people can communicate with each other in 'real time'
- d) the business and selling goods and services on the Internet
- e) a stick which helps you move in computer games
- f) the imaginary place where electronic messages, information pictures, etc. exist when they are sent from one computer to another

VI. True or False?

1. You use the Internet, you need a computer, a radio and a phone line. T    F
2. You can use the Internet to read newspapers and magazines. □
3. You cannot use the Internet to play video games.
4. The Internet can help you to do shopping.
5. You can use the Internet to 'cast' with people and make new friends.
6. You need a CD to send e-mail.
7. Multimedia pages with pictures, music and video make downloading slow.

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VII. Complete the sentences by using the words in the box below.

INTERNET TV

Is it possible to have a TV set, a (1) \_\_\_\_\_ and the Internet all in one?

With the advent of Internet TV it has become a reality.

Imagine watching a film on TV and getting (2) \_\_\_\_\_ on the actors in the film at the same time!

To enter (3) \_\_\_\_\_ addresses and write (4) \_\_\_\_\_ you use a remote control and an (5) \_\_\_\_\_ keyboard or an optional wireless keyboard.

By clicking a button, you can also read adverts, (6) '\_\_\_\_\_' with a friend, plan your holiday and play your favourite (7) \_\_\_\_\_ games.

In the future you'll be able to change the plot of the film you're watching and meddle in the private lives of the characters.

The next (8) \_\_\_\_\_ of Internet TVs will also have a smart-card for shopping, banking and other (9) \_\_\_\_\_ activities.

Web, information, interactive, e-mail, on-screen, chat, PC, generation, video.

Unit II

I. Read the following words and memorize them.

Icon – идол, кумир	Boeing – Бойнг
Microsoft – Микрософт	Lawyer – юрист
Government – правительство	Late – покойная
To break up – разделить	Harvard – Гарвард
Seattle – Сиэтл	Altair – Альтаир

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To develop – разрабатывать	Reason – причина
Software – программное обеспечение	Expert – специалист, эксперт
Quick mind – сообразительность	Operating program – рабочая программа
Microcomputer – микрокомпьютер	Ambitious – честолюбивый, целеустремленный
Employee – служащая	Couple – пара
Bridge – бридж (карточная игра)	When it comes to – когда дело доходит до
Generous – щедрый	Foundation – фонд
Charity – благотворительность	To retire – уходить на пенсию

II. Read the text and get ready to discuss it.

Everyone has heard of Bill Gates, the icon of American business and the richest man in the world.

Microsoft, the business he started with a friend in 1975, has become the world's largest computer software company. Although the company is in big trouble today – the US government has broken it up – experts say it will remain successful.

Bill Gates was born on the 28<sup>th</sup> of October, 1955, in Seattle, USA. Seattle was once famous for producing Boeing aircraft, but is now better known as the home of Microsoft. From his parents Bill got a good business sense and a quick mind. His father is a lawyer and his mother was a teacher and then a company director.

At school Bill soon showed that he was very intelligent. His favourite subjects were Maths and Science. At 13 he got interested in computers. Bill Gates and his friend Paul Allen were soon spending all their time writing programmes and learning about computers instead of doing their homework.

After finishing school in 1973, Bill went to Harvard, American's most famous university. Most of the time he worked on the computers in the university laboratory. The next year, he and Paul Allen wrote an operating programme for the Altair, one of the world's first microcomputers. Bill knew, even then, that he would revolutionize the world of computing and he left Harvard before finishing his studies.

The two friends started Microsoft in 1975, and very soon it became a business success.

In 1980, Gates bought a small company, which produced an operating system called DOS. He made some changes to it and renamed it MSDOS. He sold the right to use this system to IBM. Since 1980 MSDOS has been the standard operating system for all PCs. Microsoft has also developed such well-known programmes as Windows, Excel and Internet Explorer.

Bill's dream is to computerize everything – TVs, telephones, light, even the way you cook dinner ...

One reason for his success is that Bill has always been very ambitious and hard-working.

This hasn't left him much time for a normal personal life, but in 1994 he married Melinda French, a Microsoft employee. The couple has two children: a daughter, born in 1996, and a son, born in 1999. Bill Gates has written two books, *The Road Ahead* (1995) and *Business and the Speed of Thought* (1999). Both books are best-sellers.

Bill hasn't got much free time, but when he has a chance he likes playing golf and bridge. He is also fond of reading about science.

For such a rich person, his life is simple, and he spends very little on himself. When it comes to helping others, though, Gates is very generous. The Bill and Melinda Gates Foundation has already given \$300 million to charity, and he

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says he plans to give away almost all of his wealth when he retires.

III. Answer the questions:

1. Is Bill Gates the icon of American business and the richest man in the world?
2. When was Bill Gates born?
3. When did he start his business?
4. What did Bill Gates get from his parents? What were his parents?
5. What was his favourite subject at school?
6. Where did Bill go after finishing school in 1973?
7. When did Bill Gates and Paul Allen write an operating program for Altair?
8. When did Bill Gates buy a small company?
9. What is Bill Gate's dream?

IV. Look through the text and put the sentences in the right order.

1. In 1973 Bill Gates went to Harvard.
2. His life is very simple and he spends very little on himself.
3. In 1980, Gates bought a small company, which produced an operating system called DOS.
4. He started his business with a friend in 1975.
5. He left Harvard before finishing his studies.
6. At 13 he began interested in computers.
7. From his parents Bill got a good business sense and a quick mind.
8. One reason for his success is that Bill has always been very ambitious.
9. Bill's dream is to computerize everything.

V. Choose an answer -- a or b.

1. Bill Gates was born
  - a) in 1953 in London
  - b) in 1955, in Seattle, USA
2. Bill Gates started his business in 1975
  - a) with his friend Paul Allen
  - b) with his father, a lawyer
3. After finishing school in 1973 Bill went to
  - a) Harvard
  - b) Oxford
4. Bill Gates started his business
  - a) before finishing his studies
  - b) after finishing his studies
5. Gates bought a small company produced
  - a) DOS
  - b) Windows
6. Since 1980 MSDOS has been the standard operating system for
  - a) all PCs
  - b) palmtops
7. One reason for his success is that Bill has always been very
  - a) generous and lazy
  - b) ambitious and hard-working

VI. Speak about Bill Gates, one of the richest man in the world.

VII. Read the following text without a dictionary and try to solve the problem.

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### Jill's Bike

Jill Bates hates climbing hills. Jill rides a bicycle everywhere she goes, but she always wants to go the easiest and shortest way possible. The good news is that she lives in Greenhills, which has all its roads laid out in a strictly rectangular grid east-west roads are streets; north-south roads are avenues and the distance between any two adjacent grid points is the same. The bad news is that Greenhills is very hilly and has many one-way roads.

In choosing a route between where she starts and where she ends, Jill has three rules:

1. Avoid any climb of more than 10 meters between adjacent grid points.
2. Never go the wrong way on a one-way road.
3. Always travel the shortest possible route.

Your program should help Jill find an acceptable route.

### Unit III

- I. Find in the text and memorize the following words:

Contribution	concept	senseless
Successor	to propose	to deny
To exclude	origin	innovation
Mainstream	significance	alteration
To convince	related	expensive
To treat	to incorporate	prediction

- II. Read the list of international words:

Electro-mechanical, discuss, machines, officially, role, technology, computer technology, instruments, architecture, vacuum, final.

- III. Translate into Russian:

1. Howard Aiken's constructions to the development of the computer are often excluded from the mainstream history of computers.
2. The first stored-program machine to be put into regular operation was Maurice EDSAC.
3. In this technology the program is fix and not subject to any alteration.
4. Aiken was a visionary, a man ahead of his times.
5. Some weeks before his death Aiken had made another prediction.
6. He pointed out that hardware considerations alone didn't give a true picture of computer cost.

- IV. Read the text, translate it and answer the following questions:

1. What was Howard Aiken's contribution to the development of the computer.
2. What can you say about Aiken's predictions in the late 1940s.
3. What was his last predictions?

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## HOWARD H. AIKEN AND THE COMPUTER

Howard Aiken's Contributions to the development of the computer notably the Harvard Mark I (IBM ASSC) machine, and its successor the Mark II – are often excluded from the mainstream history of computers on two technicalities. The first is that Mark I and Mark II were electromechanical rather than electronic; the second one is that Aiken was never convinced that computer programs should be treated as data in what has come to be known as the von Neumann concept, or the stored program.

It is not proposed to discuss here the origins and significance of the stored program. Nor I wish to deal with the related problem of whether the machines before the stored program were or were not "computers". This subject is complicated by the confusion in actual names given to machines. For example, the ENIAC, which did not incorporate a stored program, was officially named a computer: Electronic Numeral Integrator And Computer. But the first stored-program machine to be put into regular operation was Maurice Wiles' ED-SAC: Electronic Delay Storage Automatic Calculator. It seems to be rather senseless to deny many truly significant innovations (by H.H.Aiken and by Eckert and Mauchly), which played an important role in the history of computers, on the arbitrary ground that they did not incorporate the stored-program concept. Additionally, in the case of Aiken, it is significant that there is a current computer technology that does not incorporate the stored programs and that is designated as (at least by TEXAS INSTRUMENTS) as "Harvard architecture", though, it should more properly be called "Aiken architecture". In this technology the program is fix and not subject

to any alteration save by intent – as in some computers used for telephone switching and in ROM.

Aiken was a visionary, a man ahead of his times. Grace Hopper and others member his prediction in the late 1940s, even before the vacuum tube had been wholly replaced by the transistor, that the time would come when a machine even more powerful than the giant machines of those days could be fitted into a space as small as a shoe box.

Some weeks before his death Aiken had made another prediction. He pointed out that hardware considerations alone did not give a true picture of computer costs. As hardware has become cheaper, software has been apt to get more expensive. And then he gave us his final prediction: "The time will come", he said, "when manufacturers will gave away hardware in order to sell software". Time alone will tell whether or not this was his final look ahead into the future.

- V. Look though the text once again. Speak about H. Aiken. Use the following words and expressions: H. Aiken's contribution to the development of the computer; Aiken was never convinced ...; programs, data, stored programs; incorporate; truly significant innovations; "Aiken architecture"; a man ahead of time; to be replaced by; more powerfull, giant machines; hardware considerations; final look ahead into the future.

## Unit IV

- I. Find in the text and memorize the following words:

Versatile	to click
Powerful	dimensional
Spreadsheet	to embed
Advantage	drag

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Equation	drop
To point	reference
To simplify	to streamline
Assuarance	accurate

II. Read and translate the list of international words:

Calculation, technical professionals, educators, Internet, syntax, problem, symbolically, numerically, illustrate, graphics, standard, client, server, data, material, document, formatting, permanent, record.

III. Make sure if you know the translation of the following word-combinations:

Technical professionals, programming languages, to take advantage of the Internet, reference book, to solve any math problem, to place text anywhere, to illustrate smb's work with graphics, on-line reference system, data values, to make smth. Easy.

IV. Read the text: "What is Mathcad?"

#### WHAT IS MATHCAD?

Mathcad is the industry standard calculation software for technical professionals, educators, and college students. Mathcad is as versatile and powerful as programming languages, yet it's as easy to learn as a spreadsheet. Plus, it is fully wired to take advantage of the Internet and other applications you used every day.

Mathcad lets you type equations as you're used to seeing them. Expanded fully on your screen. In a programming language, equations look something like this:

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$$X = (-B + \text{SQRT}(B^2 - 4 \cdot A \cdot C)) / (2 \cdot A)$$

In a spreadsheet, equations go into cells looking something like this:

$$(-B1 + \text{SQRT}(B1^2 - 4 \cdot A1 \cdot C1)) / (2 \cdot A1)$$

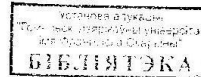
And that's assuming you can see them. Usually all you see is a number.

In Mathcad, the same equation looks the way you might see it on a blackboard or in a reference book. And there is no difficult syntax to learn; you simply point and click and your equations appear:

$$x := \frac{-b + \sqrt{b^2 - 4 \cdot a \cdot c}}{2 \cdot a}$$

But Mathcad equations do much more than look good. You can use them to solve just about any math problem you can think of, symbolically or numerically. You can place text anywhere around them to document your work. You can show how they look with Mathcad's two- and three-dimensional plots. You can even illustrate your work with graphics taken from another Windows application. Plus, Mathcad takes full advantage of Microsoft's OLE 2 object linking and embedding standard to work with other applications, supporting drag and drop and in-place activation as both client and server.

Mathcad comes with its own on-line reference system called the Resource Center. It gives you access to many useful formulas, data values, reference material, and diagrams at the click of a button.



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Mathcad simplifies and streamlines documentation of the engineering process, critical to communicating and to meeting business and quality assurance standards. By combining equations, text, and graphics in a single worksheet, Mathcad makes it easy to keep track of the most complex calculations. The document formatting and preparation features make it even easier, and by printing the worksheet exactly as it appears on the screen, Mathcad lets you make a permanent and accurate record of your work.

V. Read the following sentences and match them according to the text: put the correct letters below the numbers.

1. Mathcad ...
2. Mathcad is fully wired ...
3. Mathcad equations ...
4. You can use them ...
5. You can illustrate your work ...
6. Mathcad lets you make a permanent and ...
  - a) to solve any math problem
  - b) do much more than look good
  - c) with graphics taken from another Windows applications
  - d) and accurate record of your work
  - e) is the industry standard calculation software
  - f) to take advantage of the Internet

VI. Put + if the sentences true and – if the sentence is false.

1. Mathcad is the software for doctors.
2. It is fully wired to take advantage of the Internet.
3. There is difficult syntax to learn.
4. Mathcad equations do much more look good.
5. Mathcad comes with its own on-line reference system.

6. It gives you access to many useful formulas.

VII. Ask questions.

#### Unit V

##### Perl

I. Memorize the following words:

To scan	to slurp
To extract	string
Management	depth
Familiar	hash
Vestige	associative
To present	array
To match	sophisticated
To trace	safe
	a hole

II. Read and translate the following list of international words:

Optimize, information, report, practical, complete, elegant, minimal, historians, limit, life, techniques, program, mechanism, problem, security, translator.

III. Translate the following sentences.

1. It is also a good language for many system management tasks.



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2. The language is intended to be practical rather than beautiful.
3. Expression syntax corresponds quite closely to C expression syntax.
4. Perl can slurp in your whole life as a single string.
5. Perl uses sophisticated pattern matching techniques to scan large amounts of data very quickly.
6. If you have a problem and you don't want to write the silly thing in C, then Perl way be for you.

IV. Read the following text and catch the main idea.

Text №5

**PERL**

Perl is an interpreted language optimized for scanning arbitrary text files, extracting information from those text files, and printing reports based on that information. It's also a good language for many system management tasks. The language is intended to be practical (easy to use, efficient, complete) rather than beautiful (tiny, elegant, minimal).

Perl combines (in the author's opinion, anyway) some of the best features of C, sed, awk, and sh, so people familiar with those languages should have little difficulty with it. (Language historians will also note some vestiges of esh, Pascal, and even BASIC-PLUS.) Expression syntax corresponds quite closely to C expression syntax. Unlike most Unix utilities, Perl does not arbitrarily limit the size of your data – if you've got the memory, Perl can slurp in your whole file as a single string. Recursion is of unlimited depth. And the hash tables used by associative arrays grow as necessary to prevent degraded performance. Perl uses sophisticated pattern matching

techniques to scan large amounts of data very quickly. Although optimized for scanning text, Perl can also deal with binary data, and can make dbm files look like associative arrays. Setuid Perl scripts are safer than C programs through a dataflow tracing mechanism which prevents many stupid security holes. If you have a problem that would ordinarily use sed or awk or sh, but it exceeds their capabilities or must run a little faster, and you don't want to write the silly thing in C, then Perl may be for you. There are also translators to turn your sed and awk scripts into Perl scripts.

V. Complete the sentences by using the words below:

1. Perl is ... optimized for scanning arbitrary text files.
2. Perl combines some of the best ... of C.
3. Perl does not ... limit the size of your data.
4. If you have a problem and you don't want to write the ... in C, then Perl may before you.
5. There are also ... to turn sea and awk ... into Perl ... .  
Translators, scripts, arbitrary, features, silly thing, scripts.

VI. Answer the following questions:

1. What is Perl?
2. What is Perl used for?
3. What does Perl combine?
4. Perl uses sophisticated pattern, doesn't it?
5. Are setuid Perl scripts safer than C programs?



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## Unit VI

### I. Memorize the following words:

To describe	aspect	to select
Participant	version	appropriate
Simulations	to allow	to launch
Hyperlinked	creation	behaviours
Global	to contain	to include

### II. Read and translate the following international words.

Multi-participant interactive simulations, virtual, global Internet, designer, interactive, object, document, companion, navigation, animation, physics, real-time multi-user interaction.

### III. Read the following text and catch the main idea.

#### The Virtual Reality Modeling Language

##### Introduction

The Virtual Reality Modeling Language (VRML) is a language for describing multi-participant interactive simulations – virtual worlds networked via the global internet and hyperlinked with the World Wide Web. All aspects of virtual world display, interaction and internetworking can be specified using VRML. It is the intention of its designers that VRML become the standard language for interactive simulation within the World Wide Web.

The first version of VRML allows for the creation of virtual worlds with limited interactive behavior. These worlds can contain objects which have hyperlinks to other worlds,

HTML documents or other valid MIME types. When the user selects an object with a hyperlink, the appropriate MIME viewer is launched. When the user selects a link to a VRML document from within a correctly configured WWW browser, a VRML viewer is launched. Thus VRML viewers are the perfect companion applications to standard WWW browsers for navigating and visualizing the Web. Future versions of VRML will allow for richer behaviors, including animations, motion physics and real-time multi-user interaction.

### IV. Read the following sentences and match them according to the text: put the correct letters below the numbers:

1. The Virtual Reality Modeling Language is ...
2. All aspects of virtual world display ...
3. These worlds can contain objects ...
4. When the user selects a link to a VRML document from within a correctly configured WWW browser ...
5. Future versions of VRML ...
  - a) will allow for richer behaviour
  - b) a language for describing multi-participant interactive simulations.
  - c) A VRML viewer is launched.
  - d) Interaction and internetworking can be specified using VRML.
  - e) Which have hyperlinks to other worlds.

### V. Put the sentences in the right order.

1. Future versions of VRML will allow for richer behaviors.
2. These worlds can contain objects which have hyperlinks to other worlds

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3. The VRMZ is a language for describing multi-participant interactive simulations.
  4. The first version of VRMZ allows for the creation of virtual worlds with limited interactive behavior.
  5. It is the intention of its designers that VRMZ become the standard language.
- VI. Describe the advantages of the Virtual Reality Modeling Language.
  - VII. Read the following texts without a dictionary and try to solve the problem.

**2001-2002 ACM Northeastern Regional Programming Contest**

**Problem "Wall"**

**Input file** wall.in

**Output file** wall.out

Once upon a time there was a greedy King who ordered his chief Architect to build a wall around the King's castle. The King was so greedy, that he would not listen to his Architect's proposals to build a beautiful brick wall with a perfect shape and nice tall towers. Instead, he ordered to build the wall around the whole castle using the least amount of stone and labor, but demanded that the wall should not come closer to the castle than a certain distance. If the King finds that the Architect has used more resources to build the wall than it was absolutely necessary to satisfy those requirements, then the Architect will lose his head. Moreover, he demanded Architect to introduce at once a plan of the wall listing the exact amount of resources that are needed to build the wall.

Your task is to help poor Architect to save his head, by writing a program that will find the minimum possible length

of the wall that he could build around the castle to satisfy King's requirements.

The task is somewhat simplified by the fact, that the King's castle has a polygonal shape and is situated on a flat ground. The Architect has already established a Cartesian coordinate system and has precisely measured the coordinates of all castle's vertices in feet.

**Input**

The first line of the input file contains two integer numbers  $N$  and  $L$  separated by a space.  $N$  ( $3 \leq N \leq 1000$ ) is the number of vertices in the King's castle, and  $L$  ( $1 \leq L \leq 1000$ ) is the minimal number of feet that King allows for the wall to come close to the castle.

Next  $N$  lines describe coordinates of castle's vertices in a clockwise order. Each line contains two integer numbers  $X_i$  and  $Y_i$  separated by a space ( $-10000 \leq X_i, Y_i \leq 10000$ ) that represent the coordinates of  $i^{\text{th}}$  vertex. All vertices are different and the sides of the castle do not intersect anywhere except for vertices.

**Output**

Write to the output file the single number that represents the minimal possible length of the wall in feet that could be built around the castle to satisfy King's requirements. You must present the integer number of feet to the King, because the floating numbers are not invented yet. However, you must round the result in such a way, that it is accurate to 8 inches (1 foot is equal to 12 inches), since the King will not tolerate larger error in the estimates.

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## Unit VII

The Web.

I. Find in the text and memory the following words:

To provide	medium	to receive
Widely	immense	to appeal
To distribute	utility	bunch
Acronyms	up-to-the-minute news	to enable
Perhaps	real-time news	to exchange
Experience		to be available

II. Read and translate the following word combinations:

The World Wide Web, in a visually pleasing and widely distributable manner, intimidating acronyms, fancy acronyms, an ideal medium, vast amounts, Web site, hypermedia interface, a bunch of folders, the concept of hypertext, a different paradigm, network services, E-mail, a genuinely useful tool.

III. Read the text A.

### Text A

Thanks to the World Wide Web, almost anyone can provide information on the Internet in a visually pleasing and widely distributable manner. You have undoubtedly navigated the Web and have looked at other people's sites, and you now probably know that intimidating acronyms such as "HTTP" and "HTML" are simply fancy acronyms for "Web" and "way to express information on the Web." Perhaps you have some experience providing information over the Web as well.

The Web has proven to be an ideal medium for distributing information as can be seen from its immense popularity and exponential growth. Although some have questioned the Web's utility and attributed its growth and popularity mostly to media hype, the Web is unquestionably an important means of providing all sorts of information. Not only are many up-to-the-minute news services (providing real-time news, weather, and sports) and reference materials available electronically, vast amounts of other types of data exist as well. The Internal Revenue Service, which made all of its 1995 tax forms and other information available over the World Wide Web, recently remarked that it was actually receiving fan mail for its Web site. Who would have thought that the IRS could ever receive fan mail for anything? It was not because its site was good-looking, but because it was a genuinely useful tool for thousands, perhaps millions, of people.

What makes the Web unique and so appealing as an information server? First, it provides a hypermedia interface to data. The Web uses a different paradigm for expressing information called hypermedia. A hypertext interface consists of a document and links. Links are words on which you can click to see other documents or retrieve other types of information. The Web extends the concept of hypertext to include other types of media such as graphics, sounds, and video (hence the name "hypermedia").

Although the Web provides a unique, hypermedia interface to information, there are many other effective ways to distribute data. For example, network services such as the File Transfer Protocol (FTP) and gopher existed long before the World Wide Web. E-mail has been the primary medium for communicating and exchanging information over the Internet and most other networks almost since the inception of these networks. Why did the Web become such a popular way to distribute information? The multimedia aspect of the Web

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clearly contributed to its wild success, but in order for the Web to become most effective, it had to be interactive.

IV. Complete the following sentences:

1. Almost anyone can provide information ...
2. The Web has proven to be an ideal medium ...
3. The Web is unquestionably an important means of ...
4. A hypertext interface consists of ...
5. The Web extends the concept of hypertext ...
6. Although the Web provides a unique, hypermedia interface to information ...

V. Correct the following wrong statements:

1. Very few people can provide information on Internet.
2. You have never navigated the Web and have not looked at other people's sites, have you?
3. The Web is not an ideal Medium.
4. One of the disadvantages of the Web is that it doesn't provide a hypermedia interface to data.
5. A hypertext interface consists of a document.
6. E-mail has never been the medium for communicating and exchanging information over the Internet.

VI. Answer the questions:

1. Have you ever navigated the Web?
2. What is the meaning of such acronyms as HTTP and HTML?
3. As the Web an ideal medium for distributing information?
4. Why is the Web so popular?
5. What makes the Web unique and appealing?
6. What does the Web provide?

VII. Speak on the problems presented in the text.

VIII. Read the texts without a dictionary and render them in Russian:

### Text B

#### What Is CGI?

The Common Gateway Interface (CGI) is an interface to the Web server that enables you to extend the server's functionality. Using CGI, you can interact with users who access your site. On a theoretical level, CGI enables you to extend the capability of your server to parse (interpret) input from the browser and return information based on user input. On a practical level, CGI is an interface that enables the programmer to write programs that can easily communicate with the server.

Normally, if you wanted to extend the Web server's capabilities, you would have to modify the server yourself. This is an undesirable solution because it requires a low-level understanding of network programming over the Internet and the World Wide Web protocol. It would also require editing and recompiling the server source code or writing a custom server for each task. For example, suppose you want to extend your server to act as a Web-to-e-mail gateway that would take user input from the browser and e-mail it to another user. You would have to insert code into the server that would parse the input from the browser, e-mail the input to the other user, and send a response back to the browser over a network connection.

First, such a task requires having access to the server code, something that is not always possible. Second, it is difficult and requires extensive technical knowledge. Third, it works only for your specific server. If you want to move your Web server to a different platform, you would have to start over or at least spend a lot of time porting the code to that platform.

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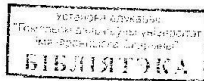
**Text C****Why CGI?**

CGI provides a portable and simple solution to these problems. The CGI protocol defines a standard way for programs to communicate with the Web server. Without much special knowledge, you can write a program in any computer language that interfaces and communicates with the Web server. This program will work with all Web servers that understand the CGI protocol.

CGI communication is handled over the standard input and output, which means that if you know how to print and read data using your programming language, you can write a Web server application. Other than parsing the input and output, programming CGI applications is almost equivalent to programming any other application. For example, if you want to program a "Hello, world!" program, you use your language's print functions and the format defined for CGI programs to print the proper message.

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по обучению чтению студентов  
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