

’ ’



’

•

”

”

“ / / . . / .: -
, 2012. – 76 .

. . , . . , .

“ ”, – “ ”.

“ ” (, , , , ,

Windows, Turbo Pascal 7.0).

Word -

MS Excel;

“ ” “ ” (-
) , .

(, 4 20.04.2010 .) 6.050101 ’ -
(9 29.04.2010 .) -

, . . .

- 1.
- 2.
- 3.
- 4.
- 5.

· -
 :
 ; ;
 “ ” “ ” ;
 “ ” “ ” ;
 ; ;
 , .

1.1.

— , , -
 , , , , -
 .
 , , .
 , , -
 , , -
 () ,
 (’)
 , .
 , , -
 , , -
 .

1.2.

(. informatio — ’ ,)— ,
 , .
 .
 , .

1948-49

1.3.

- , ;
 - , ;
 - ; ;
 - ;
 - ;
 - ; ;
 - , ;
 - ;
 - (,);
 - ; ; ; ;
 - ; ; ; ; ;
 - ; ; ; ; ;
 - ;
 - ..

1.4.

- . - , -
 0 1 ()
 „ ”, 0 - „ ” („ ” „ 1 ”) -
 .
 () - () . , -
 () , : 1 0. -
 1 (1 = 8). -
 . , 4
 - (32). .
 - 8 .

1.5.

() , -
 () . -
 , . -
 , , - -
 .

,
 .
 - () - ;
 - (), ;
 - - , -
 .
 :
 , - .
 , (, -
), , -
 .

1. ” ”.
2. ?
3. .
4. ” ”.
5. ?
6. () ?
7. .
8. ?
9. ?
10. ?

1. . . . , ”
1979. – 622 .
2. . . . : -
- 2- , 1986. – 237 .
3. . . . -
- : , 1999. – 480 .
4. . . . , : ,
1997. - 538 .
5. : - . .1. ; -
; -
Windows/ - : -
, 2003, - 50 .
6. . . . : . - -
- / , ; ;
- .2- : , 2001. – 370 .

- 1.
- 2.
- 3.
- 4.
- 5.

.
:
-
;
;
;
;

2.1.

- ,
.
1)
2)
3)
4) ()
5)
6)
7)
;
;
;
;
;
;

2.2.

,
.
.
-
.
.
.

1) (\dots) , \dots ;

2) (\dots) - (\dots) ;

(\dots) (\dots) ;

3) (\dots) - (\dots) ;

4) (\dots) , (\dots) . (\dots)

2.3.

(\dots) , (\dots) , (\dots) , (\dots) .

(\dots) , (\dots) , (\dots) , (\dots) .

(\dots) , (\dots) , (\dots) , (\dots) .

(\dots) , (\dots) , (\dots) , (\dots) .

2.4.

(\dots) , (\dots) , (\dots) , (\dots) .

(\dots) , (\dots) , (\dots) , (\dots) .

$$Y = 1,7 \cdot d^2 + (x^2 - d) / n .$$

(\dots) , (\dots) , (\dots) , (\dots) .

(\dots) , (\dots) , (\dots) , (\dots) .

$$Y = \begin{cases} (a \cdot x^2 + b), & x < 0, \\ + x \cdot e^x, & x > 0, \\ m^2 + n^2, & = 0. \end{cases}$$

(\dots) , (\dots) , (\dots) , (\dots) .

) ().

$$Y = a \cdot e^x - 0,5 \cdot x, \quad x \quad 1 \quad 100$$

1.

Y (100) (

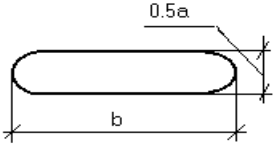
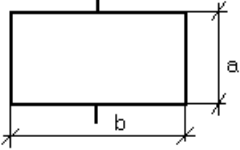
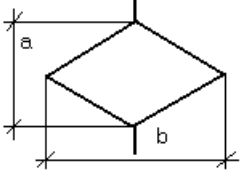
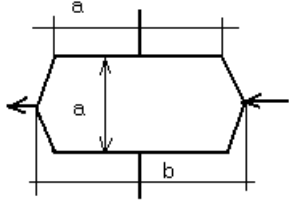
1 100 = 1).

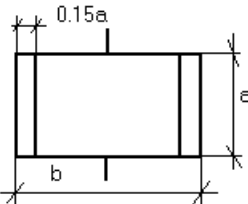
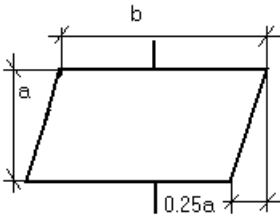
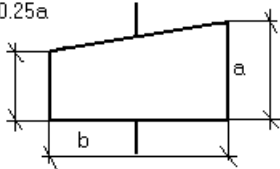
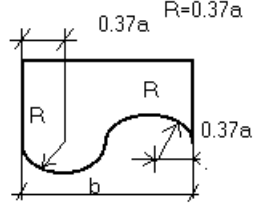
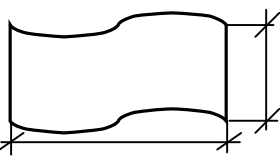
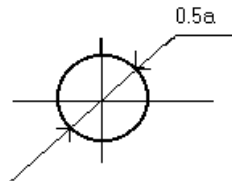
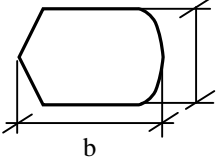
2.4.

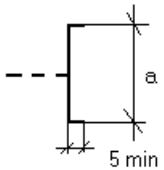
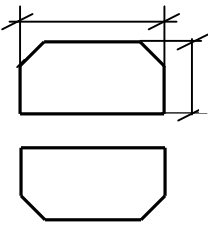
.2.1.

19.701-90 (5807-85).

2.1

/			
1	2	3	4
1			<p>()</p>
2			<p>(, .)</p>
3			<p>(, , =, >, < . .)</p>
4			<p>(,)</p>

1	2	3	4
5			<p>) (, -</p>
6			<p>,</p>
7			<p>,</p> <p>- (-</p> <p>, , ,)</p>
8			<p>,</p> <p>(, -</p> <p>, , ,)</p>
9			<p>,</p>
10	<p>,</p>		<p>- , -</p>
11			<p>,</p> <p>-</p>

1	2	3	4
12		 <p>A technical drawing of a rectangular plate with a hole. The hole is located on the left side. A dimension line indicates a distance of 'a' from the top edge of the plate to the top edge of the hole. Another dimension line indicates a distance of '5 min' from the bottom edge of the plate to the bottom edge of the hole. A dashed line extends from the left side of the hole.</p>	-
13		 <p>Two technical drawings of a rectangular plate. The top drawing shows the plate with chamfered corners and chamfered edges. The bottom drawing shows the plate with rounded corners.</p>	-



1.

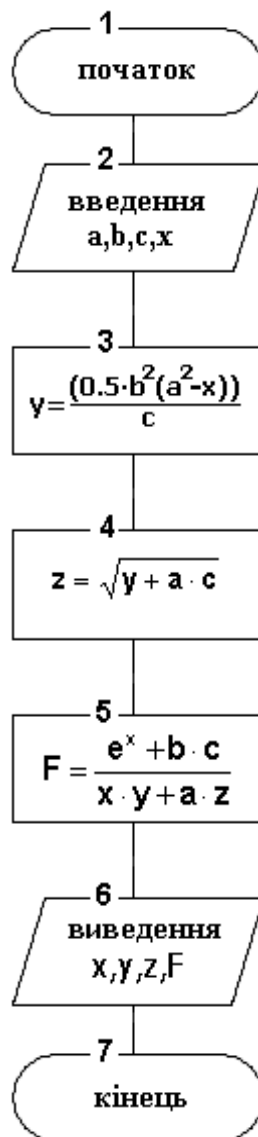
y, z

F

$$y = 0.5 \cdot b^2(a^2 - x) / c;$$

$$z = \sqrt{y + a \cdot c};$$

$$F = (e^x + b \cdot c) / (x \cdot y + a \cdot z).$$



.2.1.

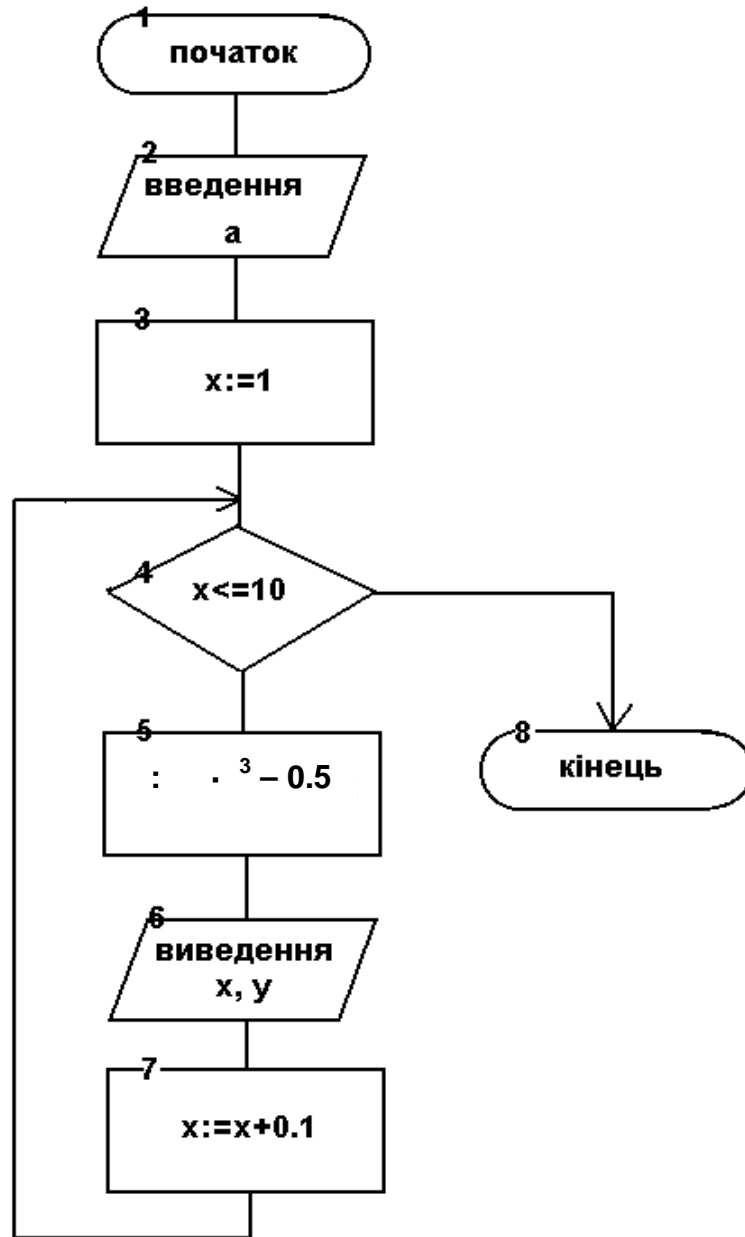
(1)

$$y = a \cdot x^3 - 0,5,$$

1 10

= 0,1.

. 2.2.



. 2.2.

(2)

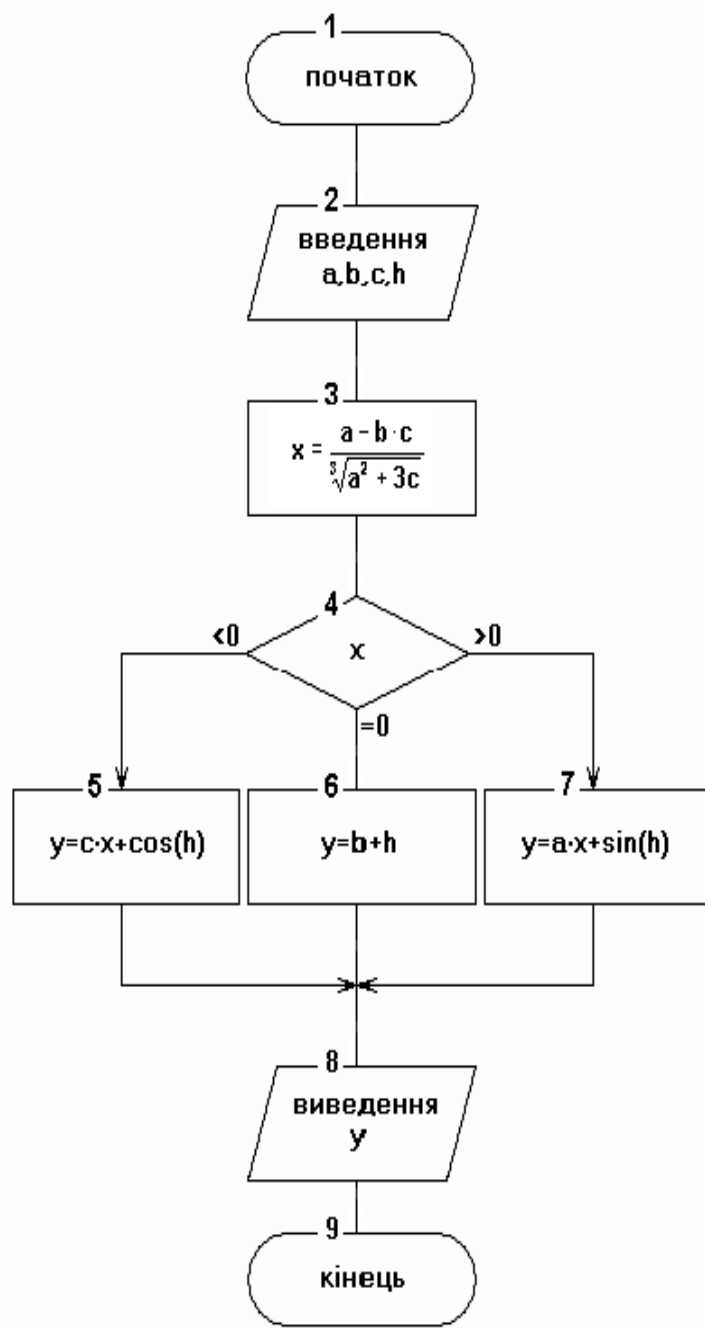
3.

$$Y = \begin{cases} a \cdot x + \sin(h), & > 0; \\ b+h, & = 0; \\ + + \cos(h), & < 0, \end{cases}$$

$$x = (a - b \cdot c) / \sqrt[3]{a^2 + 3 \cdot c}$$

3

.2.3.



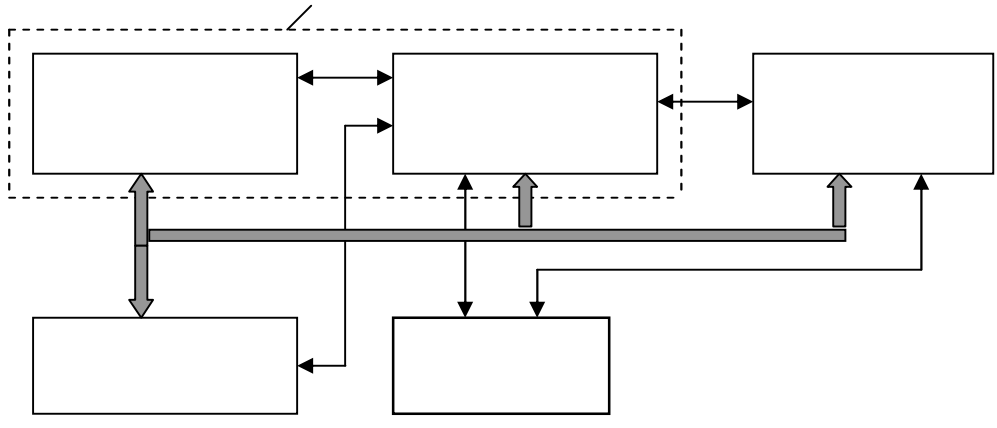
.2.3.

(3)

1. , .
 2. .
 3. () .
 4. .
 5.) ;
 6.) ;
 7.) .
 8. “ ”
 9. “ ”.
- “ - ()”.
- “ ”.
- “ ”.

1. : - . .1. ; -
 ; -
 Windows/ . . . -
 , 2003, - 50 .
2. Turbo Pascal:
 / : . . , . . , . . -
 . - : , 2001. - 68 .
3. Turbo
 Pascal: . . : , 1995. - 351 .

Fragment of text containing various punctuation marks and symbols, including commas, periods, dashes, and parentheses, scattered across the page.



. 3.1.

()- () -
 , ,
 .3.1.
 :
 - - - ;
 - - ' ;
 - - ;
 - - - ;
 - - , ;
 - - ;

().

- 1) ;
- 2) ;
- 3) ;
- 4) ;
- 5) ;
- 6) ;
- 7) .

- 1) ;
- 2) ;
- 3) .

() () () .
 () () .
 , , , (2-3%),
 , () ,
 () .
 () ,

- 1) .

2) ()

3) ()

1) ()

2) ;

3) ;

4) ()

1) ;

2) ()

()

1) ()

2) ()

;

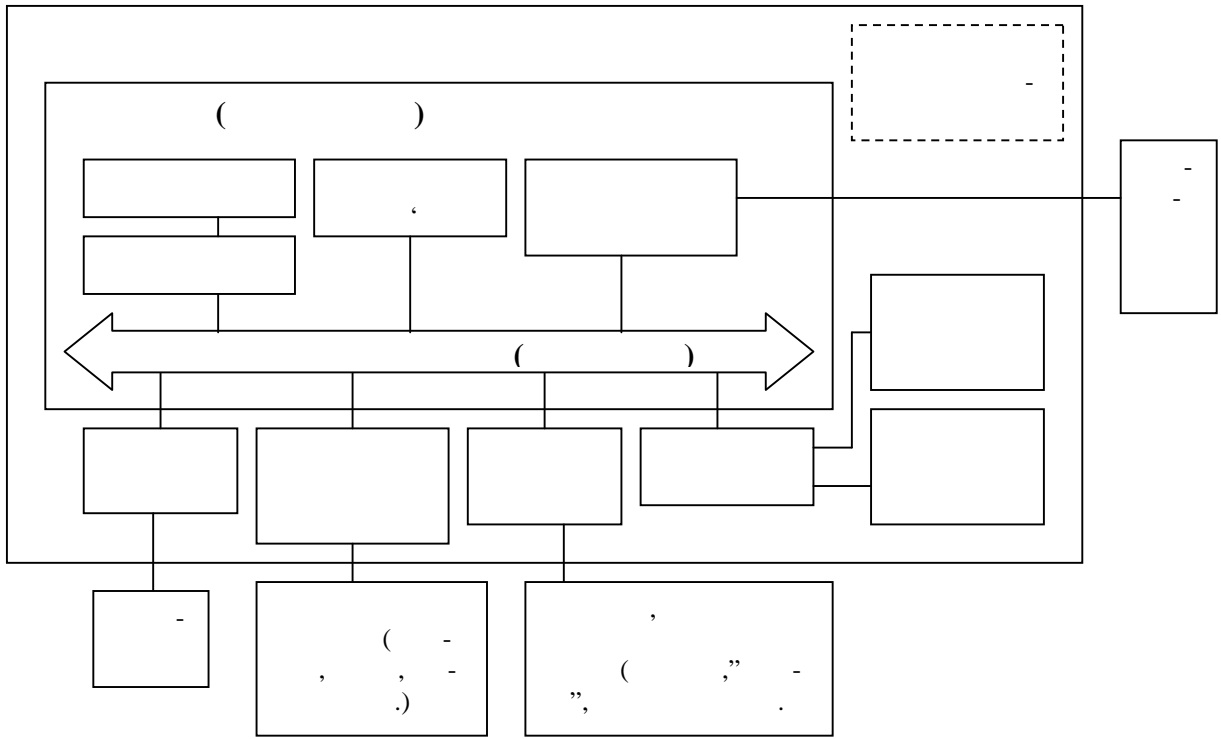
3) ()

()

4) () ;

5) ;

6) -



. 3.2. -

- 1. :
 - 2. , .
 - 3. .
 - 4. .
 - 5. .
 - 6. .
 - 7. .
 - 8. .
 - 9. , .
-
- 1. : . . - :
 - 2. :- :: , 1991. - 304 .
 - 2. : . , / . . . , - :: , 1991.

4
Windows

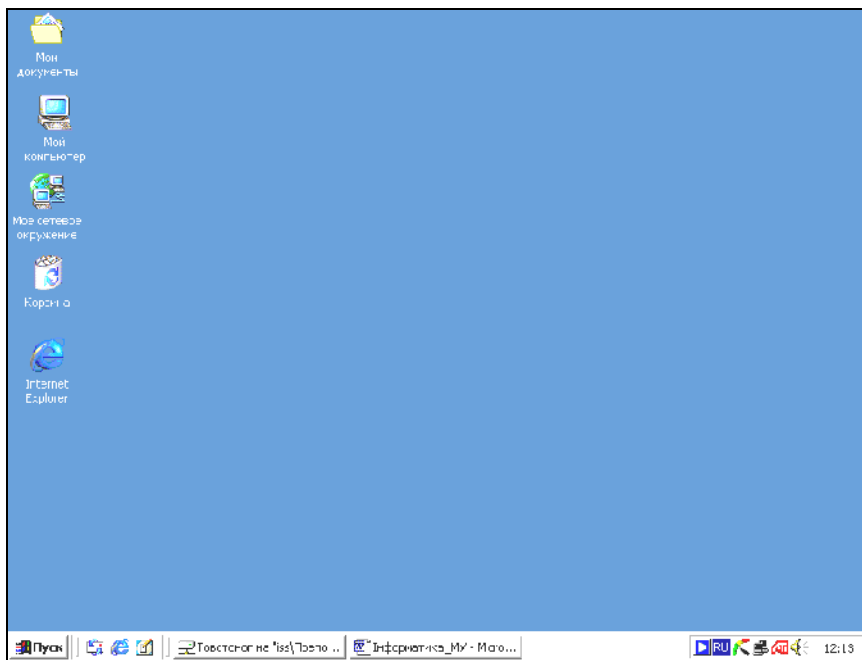
1. Windows
2. Windows

- 3.
- 4.
- 5.
- 6.
- 7.
8. Windows
- 9.

:
Windows;
Windows;

4.1. Windows
, , ,
, . ,
.,

Windows (. 4.1).



. 4.1. Windows

:
, Internet Explorer .
.
.

4.2.

Windows

Windows.

Internet.

Microsoft Exchange

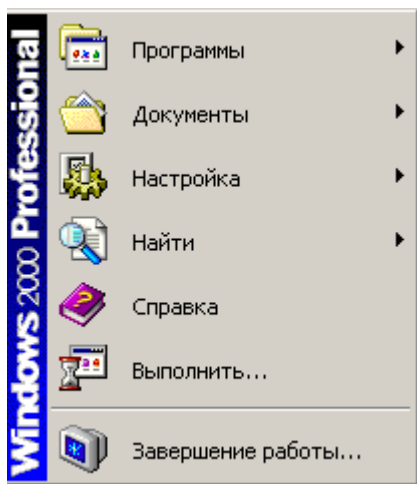
- Internet Explorer –

Internet Explorer.

Internet.

3.

Windows (4.2).



. 4.2.

Windows

Windows

Ctrl+Esc

Windows,

Windows

Win-

dows.

4.4.

1)

2)

3)

4)

4.5.

4.6.

Windows

()

()

4.7.

1.



2.

3.

4.8.

Windows

1)

2)

3)

Windows;

4)

Windows.

1)

2)

Windows”;

3)

4.9.

4.9.1.

→, ←, ↓, ↑

Page Up, Page Down -

Home, End -

Esc -

Alt, Shift, Ctrl -

Insert -

Backspace, Delete -

Enter -

Windows).

Windows (

4.9.2.

F

1 12 (F1, F2

. .).

Alt Ctrl.

4.9.3.

Num Lock

Num Lock -

Enter, Insert Delete,

4.9.4.

Ctrl, Alt Shift.

Alt+F
F.

Alt ,

4.9.5.

I.

1. *Windows.*
2. *Windows.*
3. *Windows.*
4. *Windows?*
5. ?
6. .
7. .
8. .
9. ?
10. *Windows ?*
11. , .
12. ?
13. -
14. ?
15. , ?

()

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.

Windows

:

Windows;

5.9.6.

(. 5.1).

Windows.

F2,

5.1

F2	
F3	
Ctrl	
Ctrl + A	

Ctrl + Shift	,
Ctrl + Esc	
Alt + Esc	()
Alt + Shift + Esc	()
Alt + F4	
Alt + Enter	,
Alt + Tab	()
Alt + Shift + Tab	()
Print Screen	
Alt + Print Screen	
Shift + Del	,

5.10. Windows Windows

Windows

:

1) ();

2) ();

3) ();

4) ;

5) ;

6) . , .

;

5.11.



- -



- , -



- -



- - .

5.12.

- : (),
- ;
- ;
- Ctrl + F6.


5.13.

(-
) , , .

5.14.

; , . ,
, . ,
, . ,
, . ,
, . ,
, , , .

5.15.

- :
- ;
- ;
- Alt + F4. 

5.16.

:

- Esc;
- F10;
- .

5.17.

Enter.

5.18.

Windows
Windows
Windows
Windows

5.19.

Windows
Windows
Windows
Windows

5.20.

1)

2)

Enter.

5.21.

1)

2)

3)

Enter.

5.22.

Windows

Web,

Ctrl + A.

Shift,

Shift,

1)

2)

3)

4)

Ctrl

Ctrl; (

).

1)

2)

. 5.2 .

5.2

Home	()
End	()

Ctrl + A	-
Shift + Home	,
Shift + End	,
Shift + ↓	- , , - ↓
Shift + ↑	- , , - ↑
Ctrl +	Ctrl, , , , . - ,
	, , , . , , ,

5.23.

- ,

5.24.

- 1) ; :
 - 2) , , ;
 - 3) , , .
- Ctrl
- 1) ; (
-), ;

2)

' ('),

('),

1)

;

2)

Ctrl , (');

3)

' (').

4)

☐ ,
; Ctrl;

5.25.

”

”

1.

2.

3.

4.

Ctrl + X.

:

-

-

-

-

Ctrl + .

1. Windows -

2. .

3. .

4. ?

5. , ?

6. .

7. .

8. ?

9. .

10. ?

11. ?

12. .

13. , ; :

) ; ?

) , ?

) , ?

14. ?

15. , ?

16. , ?

17. , :

) ,

) ? ,

) ? ,

18. , -

“ Windows”

1. Windows 95: /. . . .

. . . . , 1997. – 415 .

2. Windows 95. – 2- . – ; : ,

1997. – 396 .

3. Microsoft Windows 2000 Professional: MCSE. – 2- . ,

. – : , 2001. – 631 .

4. . . . , , -

. : 2- : .1. – : “ ”, 1999. – 768 .

5. . , Windows 2000 Professional.

- : , 2002. – 864 .

6 Word

1. MS Word
2. MS Word
3. MS Word
4. ()
5. MS Word
6. (MS Word)
- 7.
- 8.
- 9.
- 10.

- . :
Word;
Word;
;

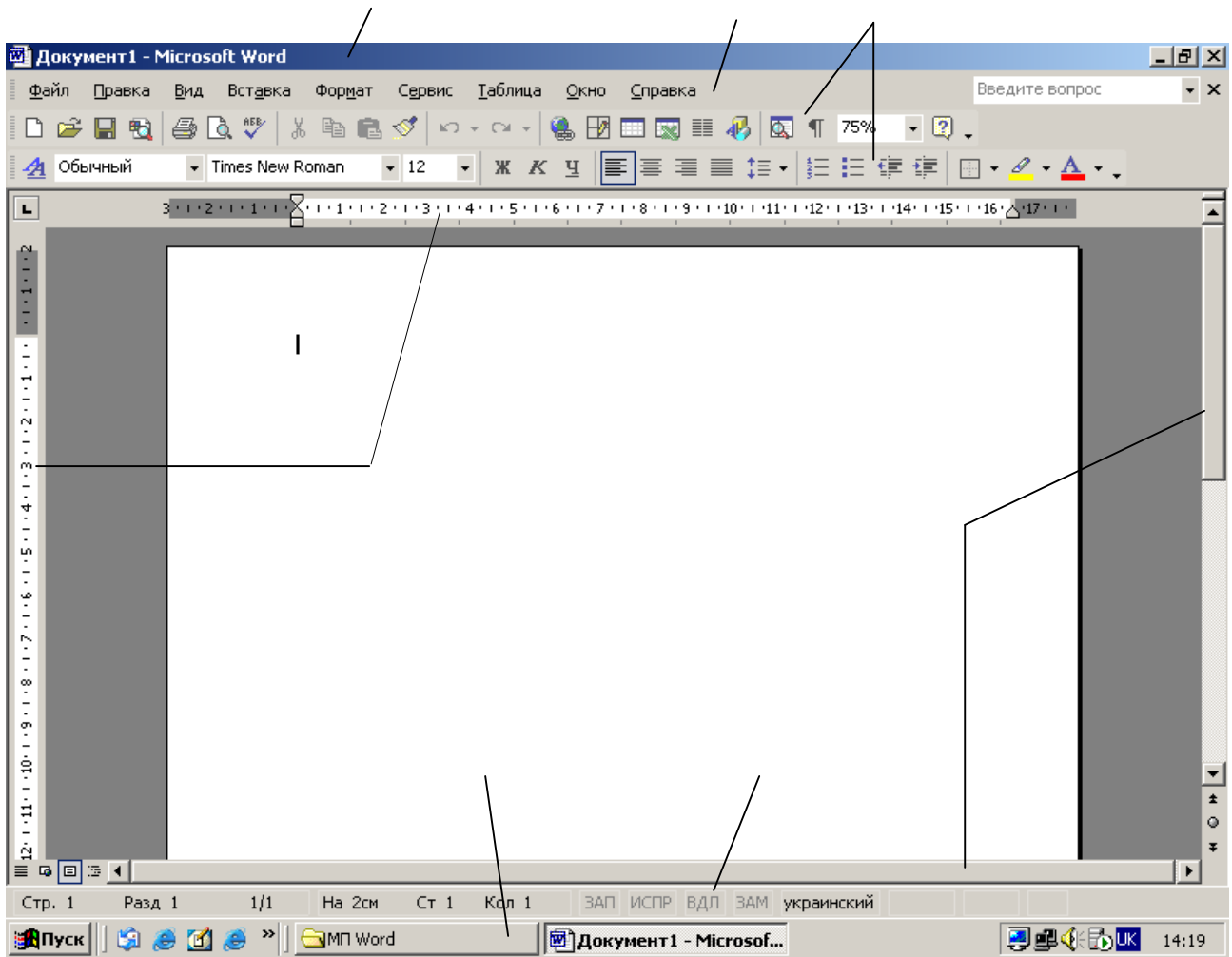
Word
MS Word –

- 6.1. MS Word
- 1) ,
- 2) ;
- 3) Microsoft Word

- 6.2. MS Word
- MS Word
- 1) :
- 2) ,
- 3) MS Word,
:

MS Word (), MS Word MS Word

6.3. MS Word MS Word (. 6.1)



. 6.1. Word

- 1) .
- 2) ,
- 3) ().

4) MS Word

5) (,

6) (,)

7) ,

8) Windows

Windows.

6.4. ()



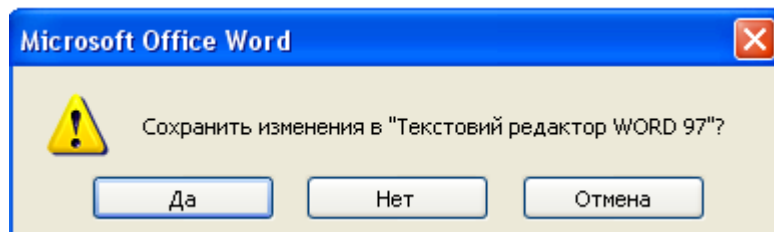
6.5. Word

1. → :

2. Alt+F4.

3. « »

, MS Word



MS Word .

MS Word

MS Word.

6.6. (MS Word)

- 1. :
- 2. (,)
- 3. (1-),
- 4. , .
- 5. (') , .

6.7.

- 1. :
- 2. → . ,
- 3. .
- 4. : Ctrl+N

6.8.

- 1. , MS Word
- 2. Enter.

6.9.

- 1. - (,) .

MS Word,

Enter. Word



6.10.

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)

:
Ctrl+ Ctrl+
Home End
Page Up Page Down
Ctrl+ Page Up
Ctrl+Page Down
Ctrl+Home Ctrl+End

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Word

7
Word ()

- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.

7.11.

	Ctrl ,
	Ctrl,
	Shift,
	Ctrl+A

7.12.

- Delete Back Space.

• , , -

1. →

2. Ctrl+ . →

3. Ctrl+X.

4. →

Ctrl+V.

1. . : ,

2. .

I- 3. Ctrl.

4. ,

5. Ctrl.

→ , Ctrl+Z.

7.13.

, n, n- , 1.

, . , -

1. → : Ctrl+S. -

2. (256).

3. ,

4. MS Word.

7.14.

1. →
2. - , .
3. , -
4. . MS Word

7.15.

1. - , :
2. → , .
3. . -
4. , -
5. .
6. .

7.16.

- , . , , .
- , - , . :
- Tab – ;
- Shift+Tab – ;
- Alt+Home – ;
- Alt+Page Up – ;
- Alt+End – ;
- Alt+Page Down – .

7.17.

- , . , , -
- , , , ,
- . ,
- . Delete.
- (-
-).

1. - , -
 2. → . ,
 3. .
 4. . . .
 → . -

1. , :
 2. → , → -
 ,
 , !:
 , , , .
 :

1. , , .
 , 3,4 5 ().
 2. →
 → .
 3. → -
 - .

Tab.

1. . :
 2. → .
 3. → .

1. .
 2. ?
 3. , ;
 4. .
 5. .
 6. , .
 7. , .
 8. , .
 9. , .
 10. ?

8
Word ()

- 18.
- 19. ’
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.

- . ; , :
; , ; , -
; , -
.

8.18.

- 1. , : -
, , → -
- 2. → . Ctrl+C
Ctrl+X
- 3. .
- 4. Ctrl+V .

8.19.

- 1. , () ,) , -
? , .
- 2. -
- 3. ; ,

8.20.

- 1.
- 2.
- 3.
- 4.

8.21.

- 1.
- 2.
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

7.22.

- () MS Word –
- 1.

- 2. → -
- 3. , , . -
- 4. . -

8.23.

MS Word

- → -
- ;
- , ' ;
- , ' .

8.24.

- \$125, 8% -
- = \$125*8% :
- 1. .
- 2. .
- 3. : = \$125*8%
- 4. .
- ' =SUM(ABOVE) =SUM(LEFT). ,

8.25.

- (A,B,C...), - (1,2,3...).
- 1, « , 1».
- 1.
- :

A1	B1	C1	D1
A2	B2	C2	D2
A3	B3	C3	D3
A4	B4	C4	D4

()

2:2

n:n -

(n -);

L:L -

».

Ln -

L

n,

L

Ln:Tv -

L -

, V -

: 1:D4

1 D4.

MS Word

AVERAGE -

MAX -

MIN -

SUM -

PRODUCT -

=PRODUCT ([A1:C1]; [C2]; 10%)

: [A1]*[B1]*[C1]*[C2]*10%.

[].

«;» ().

8.26.

→

1.

2.

) , ;
) .

ABOVE – , ;
BELOW – , ;
LEFT – , ;
RIGHT – , -

1. , .
2. , , .
3. , .
4. , .
5. , .
6. , .
7. .
8. , .

“ Word”

1. Word 97: . – :
, 1998. – 383 .
2. . Microsoft Word 97:
.: .: , 1997. – 315 .
3. Microsoft Word 97.
- .; .: 1997. – 426 .
4. . Word 97. – .: . , 1997. – 479 .
5. . Microsoft Word 97:
. .: - . 1998. – 356.
6. . Word 2000 Windows “ ”, – .: ,
2003. – 326 .
7. . Microsoft Word 2000:
. – .: - , 1999. – 987 .
8. . Word 97: . – .; .: -
, 1997. – 669 .
9. Microsoft Word 97. – .: ,
, 1999. – 960 .
10. . 10 . Word 97: . – .; .; .: -
. “ ”, 1998. – 200 .
11. Microsoft Word 2000. . – .: ,
2000. – 944.

- 1. Excel
- 2. Excel
- 3. Excel
- 4.
- 5.
- 6.
- 7.
- 7.1.
- 7.2.
- 8.
- 9.
- 10.
- 11.

· :
 - ; -
Excel; ; *Excel;* -
 ; ; -
 ; ; -

· - , -
 -
 « » · , -
 , , , -
 , , , -
 , , , -

- 9.1. Excel
Excel :
1. , ·
2. , ·
3. Microsoft Excel, -

Excel , -
 Windows, , -
 ·

, Excel

Excel

Excel.

).

1, 2 ..,

- 65536 256

9.2.

Excel

Excel

1)

2)

3)

Excel

ALT+F4.



Excel.

9.3.

Excel

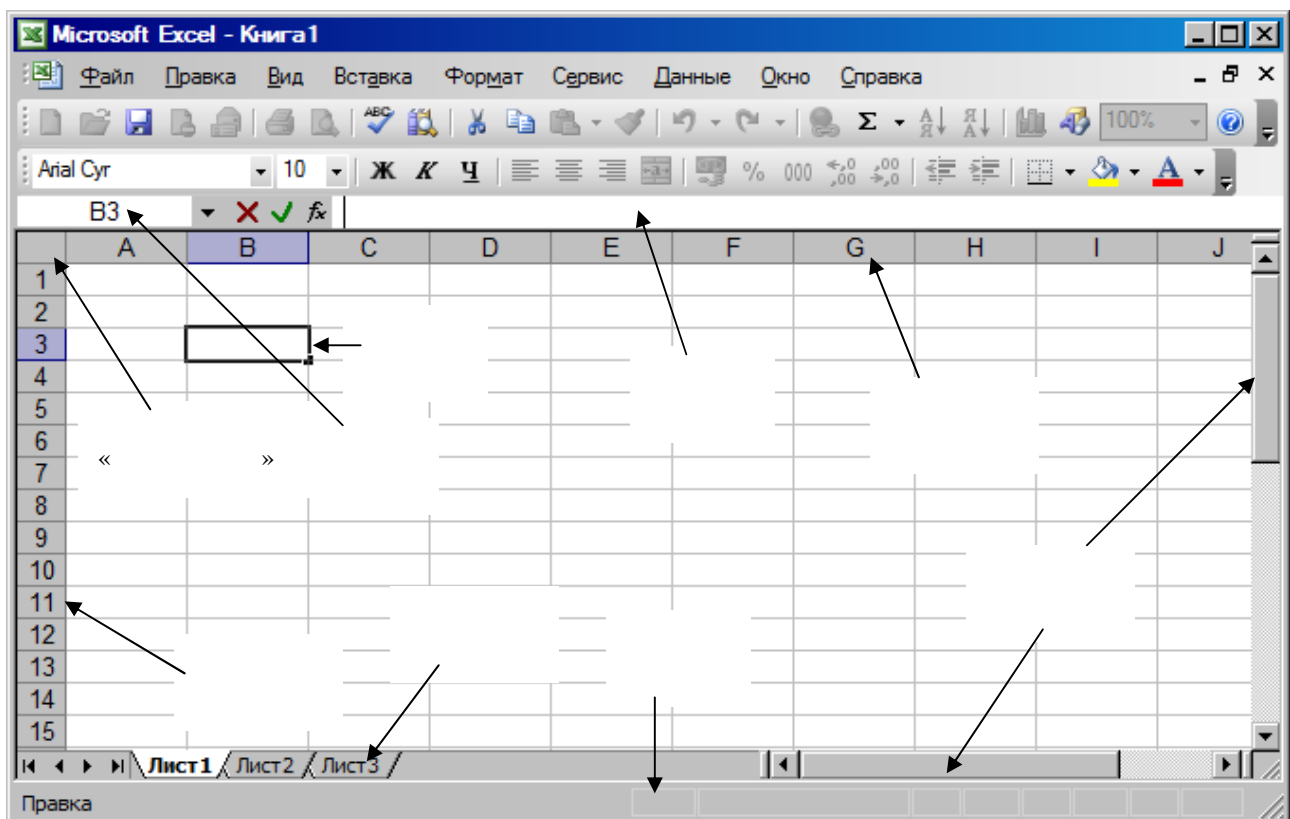
Excel

Excel

Windows.

Excel

(. 9.1).



. 9.1.

Excel

1)

2)

Excel

3)

4)

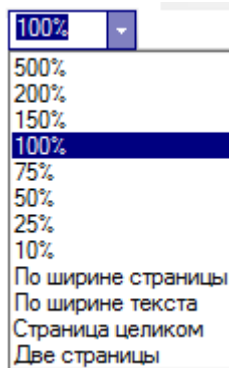
5)

).

9.4.

Ctrl+ , Ctrl+
Ctrl+ , Ctrl+
Page Done
Page Up
Home
Ctrl+ Home
Ctrl +End

(.9.2).



.9.2.

9.5.

. Excel

Enter.

Esc.



Enter.



Excel.

9.6.

Excel

9.7.

Excel

9.7.1.

1.

2.

3.

Enter.

Esc.

Tab,

9.7.2.

0, 1...9

+ (), - (), ,
:

1.

2.

0,15)

3.

(1/2).
Enter.

9.8.

1.

2.

3.

4.

9.9.

1.

2.

3.

4.



Ctrl, -
 Ctrl -
 Ctrl+Shift.

9.10.

Delete. Excel
 :
 1. .
 (, , , . .).
 2. .

9.11.

, -
 , -
 ,
 , +, -, *, / .
 = () .
 1, 1 1, = (1+ 1+ 1)/3.

1. , “ ” .
2. , *Excel.*
3. , *Excel.*
- 4.
- Excel.*
5. .
6. .
7. ,
8. *Excel.*

10
()

- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

- 20.1.
- 20.2.
- 20.3.
- 20.4.
- 20.5.
- 20.6.

;

:

;

;

;

;

,

,

.

10.12.

$\wedge -$

$= \wedge 3;$

$+ -$

$= 1+ 2;$

$- -$

$= 1- 2;$

$* -$

$= 1*3;$

$/ -$

$= 1/50;$

$= (1+ 2* 3)/3;$

10.13.

:

-

;

-

;

-

.

10.14.

:

-

:

.

1. ;
2. ;
3. ,
4. Enter , -

1. ;
2. ;
3. , -
4. (+, -, . .).
5. Enter, ,

Esc,

10.15.

1. (F2).
2. F2.
3. Backspace, - Delete.
4. (Enter), Enter ,

10.16.

1. (Alt+Enter -
2.).
3. -
4. .
5. (,

()
).
6.

10.17.

= 1+ 1+ 1+...+ 1.
(1: 1),
1- 1,



1. =
2. (C MM)
3. (1:H1)

10.18.

Excel

1. ,
2. = ,
3. ,
4. Enter,
Enter.

10.19.



1. , (
2.). =, ,
3. . . .
4. , . ().
5. . . .

10.20.

10.20.1

 , -

 :

 - , .

 - ,

 . - -

 - . -

 , . -

 - . -

 . . -

10.20.2.

 (), , ,



 . . .

 - , .

 . . -

 , . .



1. , .
2.  ,
3. ' (1 4): -
4. ' (2 4): -
5.  , -
6. > .
7. -

10.20.3.

(' 9- , .) .

10.20.4.

, , . , -

10.20.5.

1. Delete. , ,
- 2.
3. .

10.20.6.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

“ ”

- 1. Excel 97 / . . . - ; : - , 1997. - 526 .
- 2. Microsoft Excel 97 Windows. - .: DiaSoft. 1998. - 240 .
- 3. Microsoft Excel 97. : . . - .: , 1997. - 447 .
- 4. . . Microsoft Excel 97. - .; .: - , 1997. - 398 .
- 5. . . Excel 97: , - .: , 1997. - 397 .
- 6. . Excel 97: . - .; .: , 1997. - 623 .
- 7. . 10 . Excel 97: . . - .; .; .: - . “ ”, 1998. - 192 .
- 8. . Excel , . - .: , 1999. - 521 .
- 9. . . Excel : . - .: - , 2003. - 143 .

11
Turbo Pascal 7.0

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.

Turbo Pascal 7.0

– : . –
– ; *Turbo Pascal 7.0* ;
; ; ; –
– .

11.1.

– Turbo Pascal 7.0 :
– :
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
– : 0 1 2 3 4 5 6 7 8 9
– : + | - | * | / | = | > | < | (|) | · | , | ‘ | [|] | : | ; | ^ | @ | # |
\$ | { | } |
– : <= | => | := | (* | *) | (. | .) | ..

11.2.

Turbo Pascal 7.0
Turbo Pascal 7.0
:

```

Program < '      >;
Uses <          >;
label <         >;
const <        >;
type <         >;
var <          >;
procedure <    >;
function <     >;
  Begin
    <         >;
  End.

```

11.3.

Turbo Pascal 7.0

: x, y1, _Stop, variable, My_Task . . .

11.4.

var).

Turbo Pascal

7.0

(integer)

(real).

```

var a, b, x: real;
    k, m: integer;
    a, b, x

```

, k, m - .

5.

1) (): ;

+ () ; - () ,

: 123, -75, 358 . .

);

, 1.2, -0.15, 45.0, . . .

), ± n – (), E ±mE±n, m – 10. (

: 1,3·10⁻⁵ 1.3E-5, 0,75 10³ 0.75 E3, 15·10⁹ 15E9 ...

2) : ‘ ’, ‘+’, ...

3) () :
 ‘ ’, ‘ ’, ‘file’ ...

11.6.

Turbo Pascal 7.0

11.1.

11.1

	Turbo Pascal 7.0	
X	abs(x)	
e ^x	exp(x)	
arctg x	arctan(x)	
sin x	sin(x)	
cos x	cos(x)	
ln x	ln(x)	
x ²	sqr(x)	
√x	sqrt(x)	
–	round(x)	
-	trunc(x)	
-	int(x)	
-	frac(x)	
π	pi	π = 3.1415926535897932385
-	odd(x)	odd(x) - false; odd(x) - true
-	random	0...1
-	random(x)	0...

11.7.


```

+ - ;
- - ;
* - ;
/ - ;
Turbo Pascal 7.0
:
n = exp(n*ln(x));
loga b = ln(b)/ln(a);
lg x = ln(x)/ln(10);

```

11.8.

- ```

- ;
- ;
- (-
,);
- - ;
- ;
():
- ;
- ;
- ;
- , .
;
:

```
- 1)  $\frac{+ \cos(x+y)^2}{|x-y|} = (\text{sqr}(x)+\cos(\text{sqr}(x+y)))/\text{abs}(x-y);$
  - 2)  $\sqrt{\quad} - 2,7 \cdot 10^{-5} \cdot 2 = \text{sqrt}(c) - 2.7\text{E}-5*\text{sqr}(x);$
  - 3)  $^{+2} + \sin^2(x+\pi) = \exp(x+2)+\text{sqr}(\sin(x+\text{pi}));$
  - 4)  $\frac{ab}{cd} + 2,5 \cdot 10^{2.4} = (a*b)/(c*d)+2.5*\exp(2.4*\ln(10));$
  - 5)  $\frac{a+b}{-d} = (a+b)/(-d);$
  - 6)  $x^3 = x*x*x = \text{sqr}(x)*x ;$

11.9.

( ). True ( ) False

Turbo Pascal 7.0

- = ;
- <> ;
- > ;
- >= ;
- < ;
- <= ;

- 1)  $x > y$ ;
- 2)  $\text{abs}(x-y) \leq \text{eps}$ ;

NOT – ;

AND – ;

OR – ;

11.10.

« ; » ( ). Turbo Pascal 7.0

– ;

– ;

– GO TO;

–

11.11.

:= ;

– ;

– ;

« := »

;
« := ».

- 1) x:= y+3; - y+3;
- 2) b:= b+0.5; - b b+0.5; 4.0.

11.12.

Turbo Pascal 7.0

```

Read (Readln) Write (Writeln).
Read (Readln)
:
Read (a1, a2, ..., an);
Readln (a1, a2, ..., an);
a1, a2,...an - ()
' -
. -
. -
« ␣ » .

```

Enter .

Read

Readln -

Readln

Enter .

1.

```

Read(x, y); { x, y, z
Readln(z);
Read(a, b, c); a, b, c - }
Write (Writeln)

```

```

Write(b1, b2, ..., bn);
Writeln(b1, b2, ..., bn);
b1, b2, ..., bn -

```

Write

Write
Writeln,

Write

Writeln

:

|                                         |     |
|-----------------------------------------|-----|
|                                         |     |
| Write(' ');<br>Write('S =');            | S = |
| Writeln(' ');<br>Write('S =');          | S = |
| Write(' ');<br>Writeln;<br>Write('S='); | S = |

, ,

:

$\pm mE \pm n$ ,                      m - ,   n - ,  
 $\pm x.xx...x \pm xx$ ,                      x - .

. ,

.

:

x:m

x:m:n,

m -

, , ;

n -

.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 12.

**Turbo Pascal 7.0**

**Turbo Pascal 7.0.**

**Turbo Pascal 7.0.**

, , ,

, .

.

-

12  
Turbo Pascal 7.0 (                    ).  
(                    )

- 11.                    IF
- 12.                    For
- 13.                    While
- 14.                    Repeat
- 15.
- 16.
- 17.                    ,                    (                    )

: IF;  
*For, While, Repeat;*

12.11.                    IF

- 1. IF <                    > then <                    1> else <                    2>;
- 2. IF <                    > then <                    >;

IF.

IF.                    (true),                    -

,                    then.                    -

(false),                    IF.                    -

IF                    (false),                    -

IF.                    ,                    -

then,                    .

IF -                    ”;”(                    )

then                    else                    .

then    else                    .

begin ... end; ,                    -

begin    end,                    .

-

:

$$y = \begin{cases} \cos x, & < 0, \\ \sin x, & > 0, \\ 1 - x, & = 0. \end{cases}$$

```

Program Prim_IF;
Uses Crt;
 Var x,y : real;
Begin
 ClrScr;
 Writeln(' =');
 Readln(x);
 If x < 0 then y :=cos(x);
 If x > 0 then y :=sin(x)
 lse y :=1-x;
 Writeln(' x', x:4:2, ' y=', y:6:3)
End.

```

12.12.

For

:

:

1. For  $i := a1$  to  $a2$  do S;
2. For  $i := a1$  downto  $a2$  do S;

( );

For

+1 ( ) -1 ( ).

a1 -

a2 -

S -

( ).

:

1.

S.

+1

( )

-1 ( )

S.

2,

S.

For.

*i*

begin...end;

1.

(10).

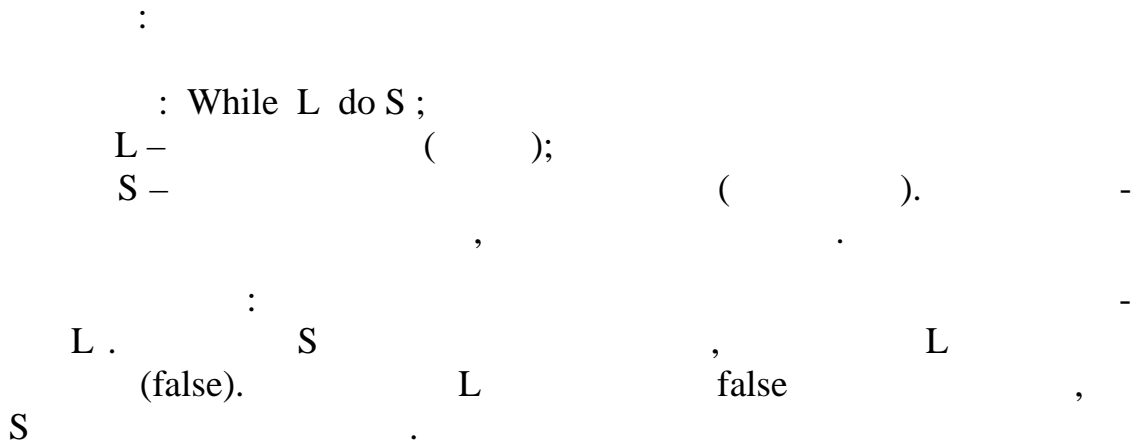
```

Program SAR;
Uses Crt;
Var S, SAR, K:real;
 i:integer;
 b:array[1..10] of real;
Begin
 ClrScr;
 Writeln(' B');
 For i:=1 to 10 do read(b[i]);
 S:=0; K:=0;
 For i:=1 to 10 do
 If b[i]>0 then
begin
 S:= S+b[i]; K:= K+1
end;
 SAR:= S/K;
 Writeln('SAR= ', SAR:8:3)
End.

```

12.13.

While



2.

$$= s(x) \quad 0 \quad \pi.$$

$$\Delta = 0,15.$$

```

.....
:= 0;
While x<=3.14 do
begin
 := cos(x);
 Writeln(' x= ', x:6:3, ' y= ', y:6:3);
 := x+0.15
end;

```

3.

ε .

$$e = 1 + \frac{1}{1!} + \frac{1}{2!} + \frac{1}{3!} + \dots + \frac{1}{n!}$$

```

Program E;
Uses Crt;
Var n:integer;
 S,H,eps:real;
Begin
 ClrScr;
 Writeln(' eps');
 Read(eps);
 Writeln('eps=',eps);
 H:=1;{H- }
 n:=1; S:=1;
 While abs(H)>=eps do
 begin
 H:= H/n; S:= S+H; n:= n+1
 end;
 Writeln(' =', S:10:8)
End.

```

12.14. Repeat.

```

:
().
:
Repeat
< 1>;
< 2>;
.....
< n >
Until L ;
L- , , Repeat Until .
- .
:
L Until -
.
L false . L true,
.
Until , , " ; "

```



L, - , L, -  
 ( Repeat).

4.  
 Repeat\_Until.

- 1)
 

```

 x:=0;
 Repeat
 :=cos(x);
 Writeln(' x=' , x:6:3, ' y=' , y:6:3);
 := x+0.15;
 Until x>=3.14;

```
- 2)
 

```

 Repeat
 H:=H/n;
 S:=S+H;
 n:=n+1;
 Until abs(H)<= eps;
 Writeln(' = ' , S:10:8);

```

12.15.

- , .  
 : M( n) - ( ), B(m,n) -  
 ( ), X(k,1,n) -  
 ( )

12.16.

Var: [ ' ]: array [i1..i2] of < >;  
 i1 - ;  
 i2 - .  
 :  
 1) var : array [1..100] of real;  
 : array [1..50] of integer;  
 100  
 [1] [100], - 50 : B[1] B [50].

12.17.

( )

- 
- 
- 

( ),

10

Internet

. — , . -  
 , , . , -  
 , - , -  
 , , . , -  
 , ( ) . -  
 , . -  
 , . -  
 , . -  
 , . -  
 , . -

1. *IF.*
2. *IF.*
3. *IF.*
4. *For.*
5. *For.*
6. *For.*
7. , ; .
8. , .
9. , .
10. , , .
11. , .
12. , .

1. . . . . 7.0. – 2- . . – . :  
 . 1999. – 398 .
2. . . . .  
 TURBO PASCAL 7.0. – 3- . . . . : “ - ”, 1998. –  
 282 .
3. . . . . / .  
 . . . . . , 2003. – 400 .

|     |                                 |    |
|-----|---------------------------------|----|
| 1.  | .....                           | 3  |
| 2.  | .....                           | 8  |
| 3.  | .....                           | 17 |
| 4.  | Windows.....                    | 22 |
| 5.  | Windows ( ..... ).....          | 28 |
| 6.  | Word.....                       | 36 |
| 7.  | Word ( ..... ).....             | 41 |
| 8.  | Word ( ..... ).....             | 45 |
| 9.  | . Excel.....                    | 50 |
| 10. | . Excel ( ..... ).....          | 56 |
| 11. | Turbo Pascal 7.0.....           | 62 |
| 12. | Turbo Pascal 7.0 ( ..... )..... | 69 |

•

“

”

30 42/4.

- . . . . .

49027, . . . . . -27,  
. . . . . ,19