

« - »

Б1. .16

35.03.10

2

3

144

III

1 9

2021

2021

1.

3

2

2.

-3.	: : B
-5.	: : - B : - -

3.

,

.

,

-

-

-

.

.

.

.

-

.

.

.

B

.

B

4.

1		7	2	0	5
2	-	12	3	4	5
3		12	3	4	5
4		11	4	2	5
5		11	4	2	5

6	-	14	3	6	5
7		9	2	2	5
8	.	14	4	4	6
9		13	3	4	6
10	.	14	4	4	6
		27	-	-	27
		144	32	32	80

5. B

1. , , .

2.

3.

4.

5.

6.

.B

7. B

8.

9.

10.

3.

α

α

-

1.

2.

3.

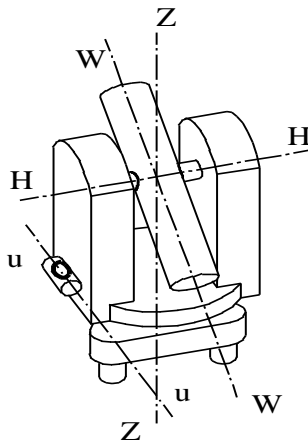
:

.

Microsoft Excel

- 1.
- 2.

:



Z Z _____

W W _____

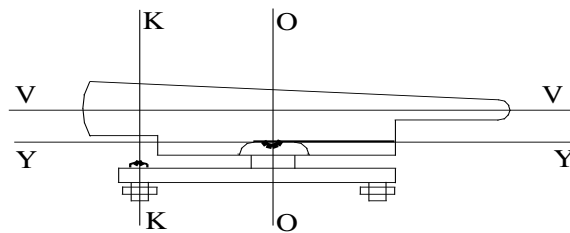
H H _____

u u _____

				β		β		β
		o	'	o	'	o	'	

:

1.



	a	b	

$\Delta = h'$

Δ

1						
	P					
	B					

b = _____.

:

$$\operatorname{tg} \alpha_{AB} = \frac{Y_B - Y_A}{X_B - X_A} = \frac{\quad}{\quad} = \frac{\quad}{\quad}; r_{AB} = \frac{\quad}{\quad};$$

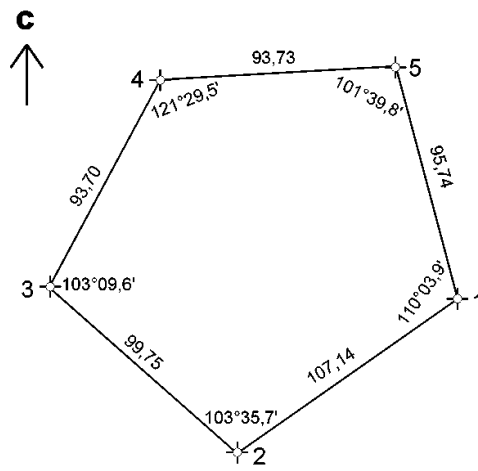
$$\alpha_{AB} = \frac{\quad}{\quad}; d_{AB} = \sqrt{(Y_B - Y_A)^2 + (X_B - X_A)^2} = \frac{\quad}{\quad}$$

Microsoft Excel

						,
1	102 1	1560 6246	1362 6050			
2	1 2	0424 5111	2551 7235			
3	2 3	2001 6687	2518 7204			
4	3 4	2203 6887	1194 5882			
5	4 5	1650 6336	0717 5405			
6	5 102	2435 7123	1936 6622			
$\Sigma = \Sigma =$ $\Sigma - \Sigma =$				$\Sigma h =$	$\Sigma h =$	

$$f_h = \Sigma h =$$

$$f = \sqrt{\quad}$$

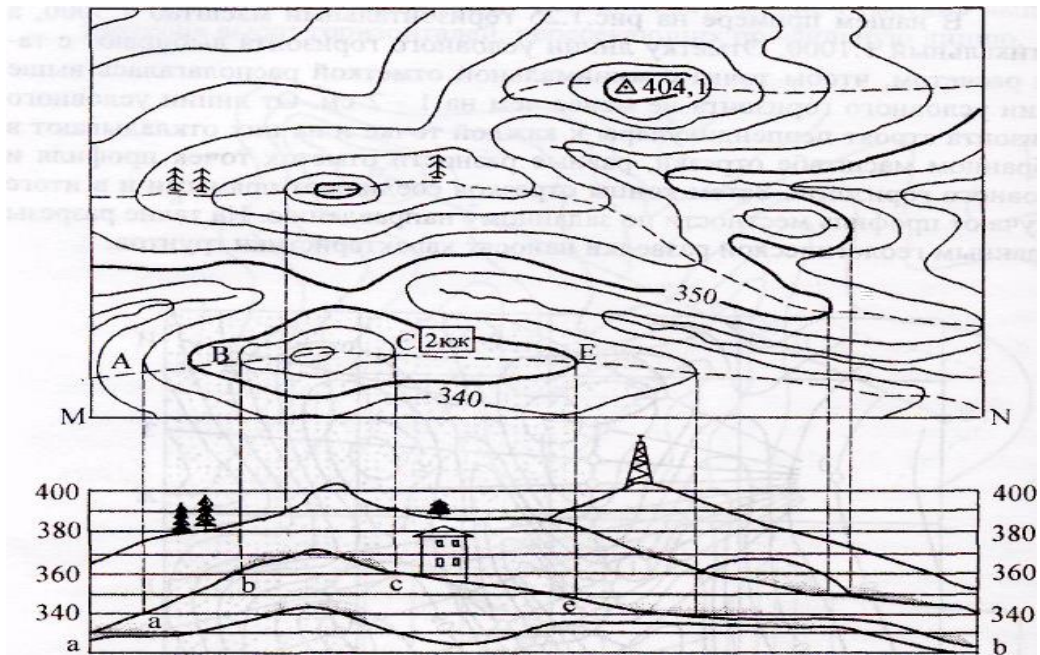


MicrosoftExcel

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

:

B C E



- 1.
- 2.

:

ABCD

AB AD

$$x_a = (x_{\max} + x_{\min})/2;$$

$$y_b = (y_{\max} + y_{\min})/2,$$

	x_a	y_b		Ax'
Ay'	b			
		$Ax' = 448$		
		$Ay' = 478$		

Ax' a Ay'
 d D D
 d d' d
 $'$, d d'

$y,$

2.

Ax_i Ay_i
 y_1 $mnkc$ $Ax_1 = 432,88 \cdot 100 = 32,88$
 h f m mn h

MicrosoftExcel (2003/2007/2010), CorelDraw

- 1.
- 2.

:

1. , .

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

2. . -

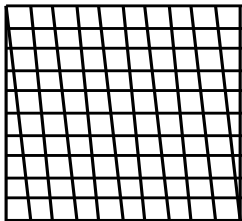
$$M \frac{1}{2000}$$

$$M \frac{1}{2000}; M \frac{1}{5000};$$

$$M \frac{1}{10000}.$$

	1:500	1:1000	1:2000	1:5000	1:10000

	1:500	1:1000	1:2000	1:5000	1:10000

1

	1:

3.

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

4.

1.

'30"
'00"
'15"
'30"

2.

$N_1 = 5^\circ 36' 15''$
 $N_2 = 185^\circ 36' 45''$
 $-0^\circ 00' 15''$
 $^\circ 59' 45''$
 $^\circ 00' 15''$
 $^\circ 59' 45''$

5.

1.

=1254.

=

2.

3.

=

=0.

4.

==

=

6.

.B

7. B

q_i

m_i

D_i

$$q_i = D_i \operatorname{tg} \beta_i \quad (1)$$

- 1)
- 2)
- 3)
- 4)

L R

L R

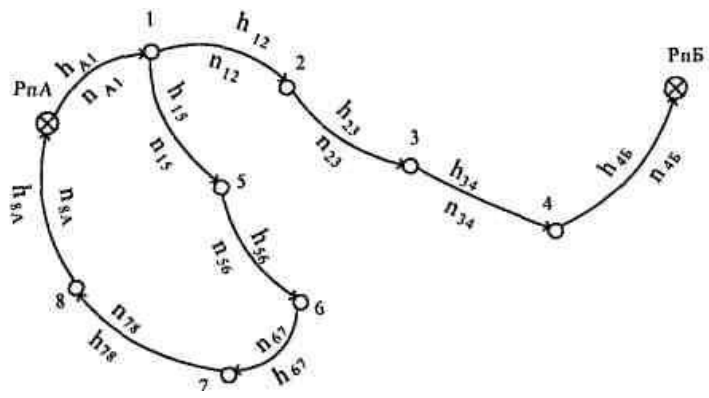
$$\beta_{L(R)} = N_i - N$$

$$m_\beta = \sqrt{\frac{[V]^2}{m(n-1)}}$$

m

n

8.



9.

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

10.

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

6.

()

()

${}^000'$	${}^000'$
${}^000'$	${}^000'$
${}^000'$	${}^000'$
$25^000'$	${}^000'$
$= 36^045'$	${}^045'$
$= 175^015'$	${}^040'$

$$= 31^{005'} - 1^{035'}$$

$$= 113^{029'} - 2^{051'}$$

$$\begin{array}{r} 000' \\ 010' \\ 040' \\ 033' \end{array} - \begin{array}{r} 2^{030'} \\ 2^{037'} \\ 040' \\ 2^{005'} \end{array} \begin{array}{r} 010' \\ - 1^{059'} \\ 001' \\ 045' \end{array}$$

$$\begin{array}{r} 000' \\ 000' \\ 030' \\ 000' \end{array} \begin{array}{r} 000' \\ 000' \\ - 8^{000'} \\ - 4^{000'} \end{array}$$

$$= 131^{045'} - 025'$$

$$= 75^{025'} - 040'$$

$$= 91^{005'} = - 2^{035'}$$

$$= 213^{029'} - 1^{051'}$$

$$\begin{array}{r} 000' \\ 010' \\ 040' \\ 033' \end{array} - \begin{array}{r} 2^{030'} \\ 2^{037'} \\ 040' \\ 3^{005'} \end{array} \begin{array}{r} 010' \\ - 1^{059'} \\ 001' \\ 045' \end{array}$$

A=51393,0, Y_A
7'.

AB

A=55335,0, Y_A=80210,0;

A=62333,0, Y_A
55'.

AB

A=67335,0, Y_A=82210,0;

- - - - -4 - -30.

$\varphi = 44^{\circ}21'$; $\varphi = 53^{\circ}02'$;
 $\varphi = 54^{\circ}41'$; $\varphi = 61^{\circ}31'$;
 $\lambda = 110^{\circ}01'$; $\lambda = 31^{\circ}23'$;
 $\lambda = 18^{\circ}04'$; $\lambda = 76^{\circ}51'$.

-
- 1.
 - 2.
 3. -34-37- -
 4. -34-37- -
 5. -34-37- -
 6. -34-37- -
 7. -34-36- -
 8. -34-36- -
 9. -34-36- -
 10. -34-36- -
 - 11.
 12. -34-36- -
 13. -34-36- -
 14. -34-36- -
 15. -34-36- -

1. $S =$ $h = -$

D - D - D D

$S =$

$h = -$

1.

2.

3.

4.

2.

3.

L	X Z	

--	--	--

98 100%
74

50

:

:

:

:

1.

2.

3.

4.

5.

6.

X

1

o

o

o

o

2

-1

7.

-1?

-0°00'15"
°59'45"
°00'15"
°59'45"

11. =
=1254.

12.

13.

= =0.

14.

=- =

1. - _____

2. -

3.

4.

5.

6.

7.

8.

$S =$

-
-

$h = -$

		-
		-
		-
		-

-		

1.

'30" '00" '15" 1'30"

2.

$N_1=5^{\circ}36'15''$; $N_2=185^{\circ}36'45''$;

$-0^{\circ}00'15''$ $^{\circ}59'45''$ $^{\circ}00'15''$ $^{\circ}59'45''$

3.

=

=1254.

4.

5.

=

=0.

6.

=-

=

XVII
XVII

XIX
XIX

XVII

XIX

-

—

-
-
-
-

1.

2.

3.

4.

5.

Y

6.

7.

8.

9.

—

10.

11.

12.

14.

15.

16.

17.

18.

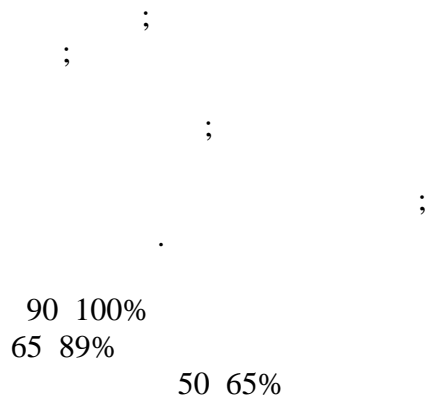
19.

20.

21.

86% - 100%	
69% - 84%	
50% - 68%	

:



- 1.
- 2.
- 3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

21.

22.

23.

24.

25.

26.

27.

28.

29.

30.

"Отлично"

-

"Хорошо"

-

"Удовлетворительно"

"Неудовлетворительно"

7.

1. 243 2-
ISBN 978-5-534-07042-2.
URL: <https://urait.ru/bcode/451773>

164 ISBN 978-5-534-13528-2.
URL: <https://urait.ru/bcode/464040>

1. <http://www.gisa.ru>
2. <http://journal.miigaik.ru/>
3. <http://www.credo-dialogue.com/>
4. <http://www.vishagi.ru>
5. <http://www.fccland.ru>

8.

530 CM-

Vivitek

W

ProScreen

HP

P Deskjet

EPSONGT1500 A

9.

Microsoft Open License (Windows XP, 7, 8, 10, Server, Office 2003-2016),
66975477 03.06.2016 ().

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 6314D932A1EC8352F4BBFDEFD0AA3F30

Владелец: Аптеменков Михаил Николаевич...

Действителен: с 21.09.2022 до 15.12.2023