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6.050.202

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Microsoft Excel

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6.050.202 "

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1.	4
2.	5
	1.....	5
	2.....	12
	3.....	28
3.	48

- **IKT21;**
- **IKT21** : **LR1.xls,**
LR2.xls, LR3.xls
- **IKT21** : **LR1.doc,**
LR2.doc, LR3.doc,

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Microsoft Excel

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1

$$y = \begin{cases} \frac{(\ln |x| + \sum_{i=1}^{10} a_i) a + b}{\max_{1 \leq i \leq 10} a_i + a}, & x \leq 0 \\ \sqrt{x} + \prod_{i=1}^{10} c_i, & 0 < x \leq 2 \\ 0; & x > 2 \end{cases}$$

, $b =$
 $c_i = (2 - \dots) / \dots, i = 1, \dots, 10;$
 $= -3, -2, -1, 1, 2, 3; \dots = 2.$

2

$$y = \begin{cases} \frac{(|\sin(x)| + \prod_{i=1}^{10} a_i) a + b}{\sum_{i=1}^{10} c_i}, & x \leq 0 \\ \sqrt[3]{x^2 + 4}, & 0 < x \leq 3 \\ 0, & x > 3 \end{cases}$$

, $c_i = (\dots a_i) \cdot a_i$
 $b =$
 $= -2, -1, 0, 1, 2, 3, 4; \dots = 3.$
 $; i = 1, \dots, 10;$

3

$$y = \begin{cases} (\log_3 x^2 + 1)a + b, & x \leq 0 \\ \prod_{i=1}^{10} (b_i + \min_{1 \leq i \leq 10} a_i), & 0 < x \leq 1,5 \\ 0, & x > 1,5 \end{cases}$$

, $b -$ a_i ;
 $b_i = b \cdot a_i, i = 1, \dots, 10$;
 $= -3; -2; -1; 0; 1; 2; 1,5; 2; = 2.$

4

$$y = \begin{cases} |x+1|^a + \sum_{i=1}^{10} \ln |a_i|, & x \leq 0 \\ \ln \left(\max_{1 \leq i \leq 10} a_i |x| \right), & 0 < x \leq 1 \\ 1, & x > 1 \end{cases}$$

$= -2; -1; 0; 0,5; 1; 2; 3; = 2.$

5

$$y = \begin{cases} (\sin x)^{a+1} + \prod_{i=1}^{10} (a_i + \frac{1}{a_i}), & x \leq 0 \\ \log_2 \left| x + \max_{1 \leq i \leq 10} a_i \right|, & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

$= -2; -1; 0; 1; 2; 3; 4; = 2.$

6

$$y = \begin{cases} \ln |x + \sin x|^a + \sum_{i=1}^{10} b_i, & x \leq 0 \\ c, & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

, $b_i - a_i$

$c - (\prod_{1 \leq i \leq 10} (x/\min a_i)) = 1, \dots, 10;$
 $=, -2, -1; 0; 1; 2; 3; = 1.$

7

$$y = \begin{cases} \prod_{i=1}^{10} (a_i + a) + (\ln |x - 1|)^a, & x \leq 0 \\ \sum_{i=1}^{10} b_i, & 0 < x \leq 2 \\ 1, & x \geq 1 \end{cases}$$

, $b_i - 1/$;
 $=, -2, -1; 0; 0,5; 0,8; 1,2; = 2$
 $= 1; 2; 0,1; 0,2; 3; -1; -4; -0,5; 2; 1,2.$

8

$$y = \begin{cases} \operatorname{sgn}(a) \prod_{i=1}^{10} (a_i/x) + b, & x \leq 0 \\ \sum_{i=1}^{10} c_i, & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

, $b - \max_{1 \leq i \leq 10} a_i$

$c_i - (\prod_{1 \leq i \leq 10} (\min a_i)) a$
 $=, -2, -1; 0; 1; 2; 3; 4. = -2.$

9

$$y = \begin{cases} \left(\sum_{i=1}^{10} a_i \right)^a x + b, & x \leq 0 \\ \prod_{i=1}^{10} c_i, & 0 < x \leq 3 \\ 1, & x > 3 \end{cases}$$

, $b =$ / ;
 $c_i =$ i ;
 $= -3; -2; 0; 1; 2; 3; 5. = -2.$

10

$$y = \begin{cases} \operatorname{sgn}(a) \prod_{i=1}^{10} \left((a_i x) + \sum_{i=1}^{10} a_i^2 \right), & x \leq 0 \\ \sum_{i=1}^{10} c_i, & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

, $c_i =$ i ;
 $= -3; -2; -1; 0; 1; 2; 3; = 2.$

11

$$y = \begin{cases} \sum_{i=1}^{10} b_i + \ln |x|^a, & x \leq 0 \\ \operatorname{sgn}(a) \sqrt[5]{x^2 + 1}, & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

, $b_i =$ $i a$;
 $= -2; -1; 0; 1; 2; 3; 4. = 1.$

12.

$$y = \begin{cases} \prod_{i=1}^{10} b_i + \sin(e^{x^2+1}), & x \leq 0 \\ \min(a_i + a), & 0 < x \leq 2 \\ 1 \leq i \leq 10 \\ 2, & x \geq 2 \end{cases}$$

$$, b_i - \quad ; \\ = -3; -2; -1; 0; 1; 2; 3. \quad = 2.$$

13.

$$y = \begin{cases} \sum_{i=1}^{10} b_i + \log_2(x^2 + 3), & x \leq 0 \\ c & 0 < x \leq 2 \\ 1, & x > 2 \end{cases}$$

$$, b - \quad a_i a; \\ c - \quad (\max_{1 \leq i \leq 10} a_i x) / a \\ = -3; -2; -1; 0; 1; 2; 3; 4. \quad = 2.$$

14.

$$y = \begin{cases} \sum_{i=1}^{10} b_i + \lg_2 5(x^3 + 3), & x \leq 0 \\ \prod_{i=1}^{10} c_i & 0 < x \leq 2 \\ 2, & x > 2 \end{cases}$$

$$, b_i - \quad a_i a; \\ c_i - \quad ; \\ = -3; -2; -1; 0; 1; 2; 4. \quad = 1.$$

15.

$$y = \begin{cases} \prod_{i=1}^{10} b_i + \sin(e^{x^2} + 1), & x \leq 0 \\ \min(a_i + a), & 0 < x \leq 2 \\ 1 \leq i \leq 10 \\ 2, & x \geq 2 \end{cases}$$

$$, b_i = -3; -2; -1; 0; 1; 2; 3. \quad i = 1; 2; \dots; 10.$$

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

:

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

:

1. 1:
 ➤ (4);
 ➤ : 12, ,
2. 2:
 ➤ 25° (5);
 ➤ (, (6);
) (7);
3. 3:
 ➤ (8);
 ➤ ,
 (9);

4. 1 1
 “ ” 1000000, 1100000, 1200000, 1300000
 (10).

2
/ " "

4- :

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. ' (1)
2. (2)
3. (3)
1, 2, 3.

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1. 1:
 ➤ (4);
 ➤ , 12, ,
 35° (5);
2. 2:
 ➤ ,
 (6);
 ➤ (:
) (7);
3. 3:
 ➤ (8);
 ➤ ,
 (9).
4. 1 1
 “ ” 1200000, 1400000, 1600000, 1800000
 (10).

3

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/ " "

	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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

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1. 1:
 - (4); , 10, ,
 - 55° (5);
2. 2:
 - (, 6);
 - (7);
3. 3:
 - (8);
 - (9).

4. 1 1
 “ ” 1000000, 1300000, 1600000, 1900000
 (10).

4

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
2. (2)
3. , 2002-2003 .
(3) 1, 2, 3.

:

1. 1:
➤ (4);
➤ , 10, ,
45° (5);
2. 2:
➤ (, (6);
➤ ((7);
3. 3:
➤ (8);
➤ ,
(9).

4. 1 1
“ ” 1000000, 1100000, 1200000, 1300000
(10).

5

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
 2. (2)
 3. , 2001-2002 .
(3)
- 1, 2, 3.

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1. 1:
➤ (4); , 10, ,
➤ 55° (5);
2. 2:
➤ (6); (7);
3. 3:
➤ (8);
➤ , (9).

4. 1 1
“ ” 1000000, 1100000, 1200000, 1300000
(10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
 2. (2)
 3. , 2001 2003 .
(3)
- 1, 2, 3.

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1. 1:
➤ (4); , 10, ,
➤ 55° (5);
2. 2:
➤ , (6);
➤ (7);
3. 3:
➤ (8);
➤ (9).

4. 1 1
“ ” 1000000, 1100000, 1200000, 1300000
(10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
 2. , 2001-2002 . (2)
 3. (3)
1, 2, 3.
- :
1. 1:
➤ (4);
➤ , 10, ,
55° (5);
 2. 2:
➤ - (6);
➤ (7);
 3. 3:
➤ (8);
➤ (9).
 4. 1 1
“ ” 1500000, 2000000, 2500000, 3000000
(10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
2. , 2001-2003 . (2)
3. (3)
1, 2, 3.

1. 1:
 - (4); , 10, ,
 - 45° (5);
2. 2:
 - (6);
 - - (7);
3. 3:
 - (8);
 - (9);
 - (,)(10);

4. 1 1
 “ ” 1400000, 1800000, 2200000, 2600000
 (10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. , (1)
 2. , 2001-2003 . (2)
 3. (3)
 - 1, 2, 3.
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1. 1:
 ➤ (4);
 ➤ , 10, ,
 55° (5);
 2. 2:
 ➤ , (6);
 ➤ (7);
 3. 3:
 ➤ , (8);
 ➤ (9).
4. 1 1 “ ” 1400000, 1800000, 2200000, 2600000 (10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. , (1)
2. (2)
3. , 2001-2002 . (3)
1, 2, 3.

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1. 1:
➤ ,
➤ (4);
➤ , 12, ,
25° (5);
2. 2:
➤ , (6);
➤ (
3. 3:
➤ (8);
➤ (9);
➤ (,) (10).
4. 1 1

“ ” 1100000, 1200000, 1300000,

1400000 (10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. , (1)
2. (2)
3. , 2001-2002 . (3)
1, 2, 3.

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1. 1:
➤ (4);
➤ , 10, ,
25° (5);
2. 2:
➤ , (6);
➤ () (7);
3. 3:
➤ (8);
➤ (9);
➤ () (10).

4. 1 1
“ ” 1200000, 1400000, 1600000, 1800000
(10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
2. (2)
3. , 2001-2003 . (3)
1, 2, 3.

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1. 1:
➤ (4);
➤ , 10, ,
55° (5);
2. 2:
➤ (6);
➤ ,
- (7);
3. 3:
➤ (8);
➤ (9).

4. 1 1
“ ” 2000000, 2100000, 2200000, 2300000
(10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
2. (2)
3. , 2001-2003 . (3)
1, 2, 3.

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1. _____ 1:
 ➤ (4);
 ➤ , 10, ,
 90° (5);
2. _____ 2:
 ➤ (6);
 ➤ ,
 - (7);
3. _____ 3:
 ➤ (8);
 ➤ (9).

4. 1 1
 “ ” 2000000, 2100000, 2200000,
 2300000 (10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
 2. (2)
 3. , 2002-2003 .
(3)
- 1, 2, 3.

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1. 1:
 - (4);
 - , 10, ,
2. 2:
 - 45° (5);
 - (, 6);
 - (7);
3. 3:
 - (8);
 - ,
 - (9).

4. 1 1
 “ ” 2100000, 2200000, 2300000, 2400000
 (10).

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	(.)			
	2001 .	2002 .	2003 .	2004 .
	1500000	2400000	2200000	2623500
	1700000	2300000	2150000	2564000
	1300000	2600250	2165000	2200000
	1800000	2650450	2078000	2156000
	1230000	2365480	1256900	1525000
	1340000	12345670	1523100	1632500

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1. (1)
2. (2)
3. , 2002-2003 . .
(3)

1, 2, 3.

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1. 1:
 - (4);
 - , 10, ,
2. 2:
 - 45° (5);
 - (6);
 -)(7);
3. 3:
 - (8);
 - ,
 - (9).

4. 1 1
 “ ” 2300000, 2400000, 2500000, 2600000
 (10).

2.3

3

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 MS Excel , (, ,
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 1. , .
 2. (» ,
)

1	1	= 1+ 2+ 3	=5*(1+ 2+ 3) ↔ 5*
2	5		
3	8		
4			

$$= 1+ 2+ 3 \quad , \quad \underline{\hspace{2cm}} \quad 2$$

$$=5*(1+ 2+ 3) \quad =5*$$

EXCEL,

	A	B	C	D
1	3	=A4*A1		
2	7			
3	9			
4	10			
5				
6				

1: 4
 (. 1). 2
 = 4* 1.
 30. 4
 2 3 0,
 4
 5 6.
 4 ()
 (\$
 4.)
 1:

=A\$4*A1

2 3
 1 2 3,
 \$A\$4

(1). 1 1 , (1)
 (1).

	A	B	C	D	E	F
1						
2	Concord	129,28	257,32	50	8	=B2/(C2-D2-E2)

(2)
 1.
 1. F2 (F2 2 ' B2/(C2-D2-E2)).
 2. -[] (1 ____
 _____) (2) -
 [] .
 - 2 ' 199,32.

1. _____
F5 23,8.

2. _____
F5 24.

3. ↓ **Concord**
F5.
 (24 _____) → (**=\$B\$2:\$B\$54;\$D\$2:\$D\$5** -
 _____) → ↓
 [_____] → (_____ - **=\$D\$2** -
 _____) → (_____) → ↓
 (_____ : 50 _____) → ↓
 → ↓ → [_____] → ↓ - (_____) → [_____]
 [_____] → ↓
 a) _____ ?
) _____ , _____)
 _____ , _____)

	A	B	C	D	E	F
1						
2	Concord	129,8	257,32	50	8	=B2/(C2-D2-E2)
3	Slim	56,3	156,3	40	7	
4	Novel	100,9	221,68	52	5,6	
5	Team	88,9	95,31	34	3,2	
6					23,8	

- 1.
- 2.

;

;

" "	500	24000	500000	1200000	500000	80000	
" "	600	23000	1300000	2200000	500000	100000	
" "	780	26000	2300000	3500000	750000	120000	
" "	690	26500	1800000	3200000	800000	220000	
" "	710	31000	2201000	3305402	400000	310000	
" "	850	28500	2400000	3009542	45000	370000	
" "	530	32000	1600000	2103698	320000	110000	

1. $\frac{500000}{1200000} = \frac{5}{12}$ (2);
2. a) $\frac{650}{24000}$ (3);
 b) $\frac{50700}{1900000}$ (4);
 c) $\frac{650}{24000}$ (5);
3. $1,2$ (6); « »;
4. 10% . « » (7).

	,	,	.	.	,	,	,
" "	500	240000	520000	1155000	500000	80000	
" "	600	230000	138000000	138205000	50000	100000	
" "	780	260000	202800000	203050000	75000	120000	
" "	690	265000	182850000	183205000	80000	220000	
" "	710	310000	220100000	220588000	123000	310000	
" "	850	285000	242250000	242720000	45000	370000	
" "	530	320000	169600000	169797000	32000	110000	

1. ,
: = $\frac{\quad}{\quad - \quad - \quad}$ (2);
2. :
a) , 550 .(3);
b) / , 1155000 .(4);
c) / , ()
242250000 , 169600000 .(5);
- 3 : « »
5% (6);
4. .1 ,
15%.
« » (7).

:

" "	500	240000	500000	1155000	500000	80000	
" "	600	230000	138000000	138225000	50000	100000	
" "	780	260000	202800000	203070000	75000	120000	
" "	690	265000	182850000	183225000	80000	220000	
" "	710	310000	220100000	220608000	123000	310000	
" "	850	285000	242250000	242740000	45000	370000	
" "	530	320000	169600000	169817000	32000	110000	

1.

$$: = \frac{\quad}{\quad} (\quad 2);$$

2.

- a) 600 . (3);
- b) / , 183225000 . (4);
- c) / (5);

3.

$$: 2,5 (6); \quad \ll \quad \gg$$

4.

$$.1 \quad \ll \quad \gg \quad 50\% . (7).$$

:

" "	500	240000	500000	1178000	500000	80000	
" "	600	230000	138000000	138248000	50000	100000	
" "	780	260000	202800000	203093000	75000	120000	
" "	690	265000	182850000	183248000	80000	220000	
" "	710	310000	220100000	220631000	123000	310000	
" "	850	285000	242250000	242763000	45000	370000	
" "	530	320000	169600000	169840000	32000	110000	

1. : = _____ (2);

2. :
 a) 700 . (3);
 b) / 242783000 . (4); 139248000 ..
 c) , (5); /

3. : 25% (6); « »

5. .1 « » , 50%. (7).

- " " /

		1					
2001	500	2400	3600000	500000	4161500	56000	
2002	500	2300	3450000	650000	4162500	57000	
2003	500	2600	3900000	670000	4633500	58000	
2004	500	2650	3975000	750000	4753500	23000	
2005	500	3100	4650000	820000	5520500	45000	

1. : $= \frac{\quad - \quad}{\quad} \cdot 100$ (2);
2. a) $\frac{3920000}{\quad}$ (3);
 b) $\frac{4262500 - 4753508}{\quad}$ (4);
 c) (5);
3. : 20004 . 10% (« 6) »;
4. .1 15%. « » 2002 . (7).

		1 .					
2001	500	2400	3600000	500000	4162000	56000	
2002	500	2300	3450000	650000	4163000	57000	
2003	500	2600	3900000	670000	4634000	58000	
2004	500	2650	3975000	750000	4754000	23000	
2005	500	3100	4650000	820000	5521000	45000	

1. ,
: $= \frac{\quad}{\quad} \cdot 100$ (2);
2. :
a) , /
3600000 . (3);
b) , /
4162000 4634000 . (4);
c) / , (5);
3. : 50% (« 6); »;
4. .1 15%.
« » 2001 . (7);

		1 .					
2001	500	2400	3600000	500000	4162028	56000	
2002	500	2300	3450000	650000	4163033	57000	
2003	500	2600	3900000	670000	4634045	58000	
2004	500	2650	3975000	750000	4754066	23000	
2005	500	3100	4650000	820000	5521015	45000	

1. ,
: $= \frac{\quad}{\quad} \cdot 100$ (2);
2. a) , / ()
3875000 . (3);
b) , / , 4163528
4756966 . (4);
c) / , (5);
3. : 2001 . (6); « »;
4. . 1 15%. ,
« » 2003 . (7).

2001	500	2400	3600000	500000	4162028	56000	
2002	500	2300	3450000	650000	4163033	57000	
2003	500	2600	3900000	670000	4634045	58000	
2004	500	2650	3975000	750000	4754066	23000	
2005	500	3100	4650000	820000	5521015	45000	

1.
$$= \frac{\text{---}}{\text{---}} \cdot 100 (\text{---} 2);$$
2. :
 - a)
$$\frac{3450000}{\text{---}} \cdot (\text{---} 3);$$
 - b)
$$\frac{\text{---}}{58000} \cdot (\text{---} 4);$$
 - c)
$$\frac{\text{---}}{\text{---}} \cdot (\text{---} 5);$$
3. : 2001 . 1,5 « --- » (--- 6);
4. .1 25%. « --- » 2004 . (--- 7);

	0		1		0	1	...
	2001	2002	2001	2002			
	50	60	40	50			
	55	65	45	55			
	130	150	100	110			
	30	35	20	25			
()	2000	25000	1555	2000			
()	3000	35000	2000	2100			
	1500	1800	1000	1200			

1. a_0, a_1, \dots, a_n :
 $a_0 = \frac{0^0 - 0}{0}; a_1 = \frac{1^1 - 1}{1}; \dots = \frac{(1^1 - 1) : 1}{(0^0 - 0) : 0}$ (2);
2. a_0, a_1, \dots, a_n :
 a) $\frac{100}{2001} \cdot (\dots 3);$
 b) $\frac{65}{150} \cdot 1 \cdot 20002 \cdot (\dots 4);$
 c) $(\dots 5);$
3. a_0, a_1, \dots, a_n :
 $2002 \cdot 10\% (\dots 6);$
4. a_0, a_1, \dots, a_n :
 $2001 \cdot (\dots 7)$

	, 1 .		, .		0	1	. . .
	⁰ 2001	¹ 2002	⁰ 2001	¹ 2002			
	50	60	40	50			
	55	65	45	55			
	130	150	100	110			
	30	35	20	25			
()	2000	25000	1555	2000			
()	3000	35000	2000	2100			
	1500	1800	1000	1200			

1. a_0, a_1, \dots :

$$a_0 = \frac{a_0 - a_0}{0}; \quad a_1 = \frac{a_1 - a_1}{1}; \quad \dots = \frac{(a_1 - a_1) : a_1}{(a_0 - a_0) : a_0} \quad (2);$$
2. :

 - a) $\frac{100}{2001} \cdot (3);$ 100 . 1 .
 - b) $\frac{0,333}{0,45} (4);$
 - c) $\frac{1}{1} (5);$
3. : 2001 , 1,5 (6);
4. .1 2- , . . 10 % . 2002 . (7).

	0		1		0	1	...
	2001	2002	2001	2002			
	50	60	40	50			
	55	65	45	55			
	130	150	100	110			
	30	35	20	25			
()	2000	25000	1555	2000			
()	3000	35000	2000	2100			
	1500	1800	1000	1200			

1. a_0, a_1, \dots, a_n :
 $a_0 = \frac{a_0 - a_0}{0}$; $a_1 = \frac{a_1 - a_0}{1}$; $\dots = \frac{(a_1 - a_0) : \frac{1}{0}}{(a_0 - a_0) : \frac{1}{0}}$ (2);

2. a) $\frac{100}{2001} \cdot (3)$;
 b) $\frac{0,25}{0,5} (4)$;
 c) (5) ;

3. $2002, 1,5$ (6);

4. 20% (7).

	, 1 .		, 1 .		0	1	..
	⁰ 2001	¹ 2002	⁰ 2001	¹ 2002			
	50	60	40	50			
	55	65	45	55			
	130	150	100	110			
	30	35	20	25			
()	2000	25000	1555	2000			
()	3000	35000	2000	2100			
	1500	1800	1000	1200			

1. $0, 1, \dots$,

$$: \quad {}_0 = \frac{{}^0 - {}^0}{0}; \quad {}_0 = \frac{{}^1 - {}^1}{1}; \quad \dots = \frac{({}^1 - {}^1): {}^1}{({}^0 - {}^0): {}^0}$$

(2);
2. a) / , 100 .
 1 . 2001 . (3);
 b) / , 0,25 0,5 2002 . (4);
 c) , 1 (5);
3. : 2002 ,
 25% (6);
4. .1 2- , ..
 20 % . 2001 .
 (7) .

		1					
" "	500	2400	1200000	1300000	1000	8000	0,923076923
" "	600	2300	1380000	4634630	500	10000	0,297758397
" "	780	2600	2028000	25546600	750	12000	0,079384341
" "	690	2650	1828500	45464334	800	22000	0,040218339
" "	710	3100	2201000	26354200	1230	31000	0,0835161
" "	850	2850	2422500	45233300	450	37000	0,053555677
" "	530	3200	1696000	21369800	320	11000	0,079364337

- :
1. = — ,
 - (2);
 2. :
 a) 838 . (3);
 b) / 40000000 . (4);
 c) , (5);
 3. : / « »
 5 % (6);
 4. . 1 « »
 (7).

		1					
" "	500	2400	1251000	1300000	1000	8000	0,962307692
" "	600	2300	1431000	4634630	500	10000	0,308762512
" "	780	2600	2079000	25546600	750	12000	0,081380693
" "	690	2650	1879500	45464334	800	22000	0,041340097
" "	710	3100	2252000	26354200	1230	31000	0,085451275
" "	850	2850	2473500	45233300	450	37000	0,054683165
" "	530	3200	1747000	21369800	320	11000	0,081750882

1. = —,
- (2);
2. :
 - a) , 650 .
 - b) / (3);
 - c) 45464338 . (4);
 - (5);
3. : / « » 5 % (6);
4. . 1 10%. « » (7).

		1					
" "	500	2400	1259000	1300000	1000	8000	0,968461538
" "	600	2300	1441000	4634630	500	10000	0,310920181
" "	780	2600	2091000	25546600	750	12000	0,081850422
" "	690	2650	1901500	45464334	800	22000	0,041823993
" "	710	3100	2283000	26354200	1230	31000	0,086627558
" "	850	2850	2510500	45233300	450	37000	0,055501146
" "	530	3200	1758000	21369800	320	11000	0,082265627

- :
1. = — ,
 - , - ; (2)
 2. :
 a) , 750
 . (3);
 b) / , 25500000,
 5000000 . (4);
 c) / , (1 .
 (5);
 3. : / « »
 35 % (6);
 4. . 1
 5%. « »
 (7).

MS EXCEL

1. ?
2. ' MS Excel?
3. ?
4. ?
5. ?
6. () ?
7. .
8. ?
9. ' () ?
10. MS Excel.
11. ()
12. ()
13. " " ?
14. " " ?
15. (,)
16. " " ?
17. MS Excel.
MS Excel ()?
18. ?
19. : :
20. : " " ?
21. , ?
22. DDE ?
23. OLE ?
24. .
25. " ' " ?
26. ?
27. MS Excel.

1.
 , 2001 .
2. “ ”,
 “ ”, 2002 .
3. ’ –
 , 2003.
4. Windows. –
 , 2003.
5. . . Microsoft Word. – , 2003.
6. . . Microsoft Excel. – , 2003.
7. , Internet. – ,
 2003.
8. ,
 1 – : , 2004.
9. ,
 3 – : , 2004.

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