

Variant 1

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	3	9	15	21	27	33
20	2	2	1			
40	1	7	4			
60			6	42	4	
80			2	11	8	1
100				1	2	6

Variant 2

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	4	9	14	19	24	29
10	2	3				
20		7	3			
30			2	50	2	
40			1	10	6	
50				4	7	3

Variant 3

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	20	30	40	50	60
15	1	2				
20		8	12	6		
25			13	25	8	
30			2	9	6	1
35				1	3	3

Variant 4

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	15	20	25	30	35
33	2	6				
43		4	4			
53			7	35	8	
63			2	10	8	
73				5	6	3

Variant 5

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	5	10	15	20	25	30
100	2	4	1			
120	1	6	4			
140		1	2	35	12	
160			3	8	6	
180				2	8	5

Variant 6

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	15	20	25	30	35	40
5	4	2				
10		6	4			
15			6	45	2	
20			2	8	6	
25				4	7	4

Variant 7

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	20	30	40	50	60
32	5	1				
36		6	2			
40			5	40	5	
44			2	8	7	
48				4	7	8

Variant 8

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	5	10	15	20	25	30
20	1	5				
30		5	3			
40			9	40	2	
50			4	11	6	
60				4	7	3

Variant 9

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X		14	29	44	59	74	89
20						2	2
40					2	4	3
60				8	29	7	
80			2	7	15	3	
100		7	6	2	1		

Variant 10

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	15	20	25	30	35
6	4	2				
12		6	2			
18			5	40	5	
24			2	8	7	
30				4	7	8

Variant 11

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

X \ Y	24	29	34	39	44	49
15	2	3				
25		7	3			
35			2	50	2	
45			1	10	6	
55				4	7	3

Variant 12

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	10	15	20	25	30	35
30	2	6				
40		4	4			
50			7	35	8	
60			2	10	8	
70				5	6	3

Variant 13

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	5	10	15	20	25	30
12	4	2				
22		6	4			
32			6	45	2	
42			2	12	6	
52					7	4

Variant 14

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	3	13	23	33	43	53
20	1	5				
30		5	3			
40			9	40	2	
50			4	11	6	
60				4	7	3

Variant 15

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x	7	17	27	37	47	57
y						
6	4	2				
12		6	2			
18			5	35	6	
24			2	13	6	
30				4	7	8

Variant 16

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	16	26	36	46	56	66
8	2	4				
12		3	7			
16			5	30	10	
20			7	10	8	
24				5	6	3

Variant 17

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	2	7	12	17	22	27
15	2	4				
25		6	2			
35			3	45		
45			1	15	8	
55				4	7	3

Variant 18

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	11	16	21	26	31	36
20	2	4				
30		6	3			
40			6	45	6	
50			2	8	4	
60				4	7	3

Variant 19

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	14	18	22	26	30	34
8	3	3				
18		5	4			
28			40	2	8	
38			5	10	6	
48				4	7	3

Variant 20

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	5	10	15	20	25	30
11	4	2				
21		5	3			
31			5	43	4	
41			2	10	8	
51				4	7	3

Variant 21

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

X \ Y	3	13	23	33	43	53
3	2	2	1			
9	1	7	4			
15			6	42	4	
21			2	11	8	1
27				1	2	6

Variant 22

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

X \ Y	5	10	15	20	25	30
4	2	3				
9		7	3			
14			2	50	2	
19			1	10	6	
24				4	7	3

Variant 23

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

X \ Y	15	20	25	30	35	40
12	1	2				
22		8	12	6		
32			13	25	8	
42			2	9	6	1
52				1	3	3

Variant 24

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	15	20	25	30	35
33	2	6				
43		4	4			
53			7	35	8	
63			2	10	8	
73				5	6	3

Variant 25

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	5	10	15	20	25	30
100	2	4	1			
120	1	6	4			
140		1	2	35	12	
160			3	8	6	
180				2	8	5

Variant 26

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	15	20	25	30	35	40
5	4	2				
10		6	4			
15			6	45	2	
20			2	8	6	
25				4	7	4

Variant 27

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	20	30	40	50	60
32	5	1				
36		6	2			
40			5	40	5	
44			2	8	7	
48				4	7	8

Variant 28

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	5	10	15	20	25	30
20	1	5				
30		5	3			
40			9	40	2	
50			4	11	6	
60				4	7	3

Variant 29

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X		14	29	44	59	74	89
20						2	2
40					2	4	3
60				8	29	7	
80			2	7	15	3	
100		7	6	2	1		

Variant 30

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

Y \ X	10	15	20	25	30	35
6	4	2				
12		6	2			
18			5	40	5	
24			2	8	7	
30				4	7	8

Variant 31

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

X \ Y	24	29	34	39	44	49
15	2	3				
25		7	3			
35			2	50	2	
45			1	10	6	
55				4	7	3

Variant 32

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	10	15	20	25	30	35
30	2	6				
40		4	4			
50			7	35	8	
60			2	10	8	
70				5	6	3

Variant 33

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	5	10	15	20	25	30
12	4	2				
22		6	4			
32			6	45	2	
42			2	12	6	
52					7	4

Variant 34

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	3	13	23	33	43	53
20	1	5				
30		5	3			
40			9	40	2	
50			4	11	6	
60				4	7	3

Variant 35

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x	7	17	27	37	47	57
y						
6	4	2				
12		6	2			
18			5	35	6	
24			2	13	6	
30				4	7	8

Variant 36

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	16	26	36	46	56	66
8	2	4				
12		3	7			
16			5	30	10	
20			7	10	8	
24				5	6	3

Variant 37

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	2	7	12	17	22	27
15	2	4				
25		6	2			
35			3	45		
45			1	15	8	
55				4	7	3

Variant 38

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	11	16	21	26	31	36
20	2	4				
30		6	3			
40			6	45	6	
50			2	8	4	
60				4	7	3

Variant 39

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	14	18	22	26	30	34
8	3	3				
18		5	4			
28			40	2	8	
38			5	10	6	
48				4	7	3

Variant 40

TASK

Results of values of two dimensional random variable are given as the correlation table.

1. Plot the graph of an empirical regression line Y upon X.
2. Plot the graph of an empirical regression line X upon Y.
3. Calculate numerical characteristics.
4. Plot the theoretical regression line Y upon X.
5. Calculate the correlation coefficient and the determination coefficient.
6. Calculate the correlation ratio. Compare it with the correlation coefficient.
7. Make an analysis of the obtained values.

x \ y	5	10	15	20	25	30
11	4	2				
21		5	3			
31			5	43	4	
41			2	10	8	
51				4	7	3