

## Appendix Les 1: Contradiction Table of Inventive Principles

What should be improved?	What is deteriorated ?												
	1. Weight of movable object	2. Weight of fixed object	3. Length of movable object	4. Length of fixed object	5. Area of movable object	6. Area of fixed object	7. Volume of movable object	8. Volume of fixed object	9. Speed	10. Force	11. Stress, pressure	12. Shape	13. Object's composition stability
1. Weight of movable object			15 8 29 34		29 17 38 34		29 2 40 28		2 8 15 38	8 10 18 37	10 36 37 40	10 14 35 40	1 35 19 39
2. Weight of fixed object				10 1 29 35		35 30 13 2		5 35 14 2		8 10 19 35	13 29 10 18	13 10 29 14	26 39 1 40
3. Length of movable object	8 15 29 34				15 17 4		7 17 4 35		13 4 8	17 10 4	1 8 35	1 8 10 29	1 8 15 34
4. Length of fixed object		35 28 40 29				17 7 10 40		35 8 2 14		28 10	1 14 35	13 14 15 7	39 37 35
5. Area of movable object	2 17 29 4		14 15 18 4				7 14 17 4		29 30 4 34	19 30 35 2	10 15 36 28	5 34 29 4	11 2 13 39
6. Area of fixed object		30 2 14 18		26 7 9 39						1 18 35 36	10 15 36 37		2 38
7. Volume of movable object	2 26 29 40		1 7 35 4		1 7 4 17				29 4 38 34	15 35 36 37	6 35 36 37	1 15 29 4	28 10 1 39
8. Volume of fixed object		35 10 19 14	19 14	35 8 2 14						2 18 37	24 35 38 40	7 2 3 5	34 28 35 40
9. Speed	2 28 13 38		13 14 8		29 30 34		7 29 34			13 28 15 19	6 18 38 40	35 15 18 34	28 33 1 18
10. Force	8 1 37 18	18 13 1 28	17 19 9 36	28 10	19 10 15	1 18 36 37	15 9 12 37	2 36 18 37	13 28 15 12		18 21 11	10 35 40 34	35 10 21
11. Stress, pressure	10 36 37 40	13 29 10 18	35 10 36	35 1 14 16	10 15 36 28	10 15 36 37	6 35 10	35 24 35	6 35 36	36 35 21		35 4 15 10	35 33 2 40
12. Shape	8 10 29 40	15 10 26 3	29 34 5 4	13 14 10 7	5 34 4 10		14 4 15 22	7 2 35	35 15 34 18	35 10 37 40	34 15 10 14		33 1 18 4
13. Object's composition stability	21 35 2 39	26 39 1 40	13 15 1 28	37	2 11 13	39	28 10 19 39	34 28 35 40	33 15 28 18	10 35 21 16	2 35 40	22 1 18 4	
14. Strength	1 8 40 15	40 26 27 1	1 15 8 35	15 14 28 26	3 34 40 29	9 40 28	10 15 14 7	9 14 17 15	8 13 26 14	10 18 3 14	10 3 18 40	10 30 35 40	13 17 35
15. Duration of moving object's operation	19 5 34 31		2 19 9		3 17		10 2 19 30		3 35 5	19 2 16	19 3 27	14 26 28 25	13 3 35
16. Duration of fixed object's operation		6 27 19 16		1 40 35				35 34 38					39 3 35 23
17. Temperature	36 22 6 38	22 35 9	15 19 9	3 35 39 18	35 38		34 39 40 18	35 6 4	2 28 36 30	35 10 3 21	35 39 19 2	14 22 19 32	1 35 32
18. Illumination	19 1 32	2 35 32	19 32 16		19 32 26		2 13 10		10 13 19	26 19 6		32 30	32 3 27
19. Energy expense of movable object	12 18 28 31		12 28		15 19 25		35 13 18		8 15 35	16 26 21 2	23 14 25	12 2 29	19 13 17 24
20. Energy expense of fixed object		19 9 6 27								36 37			27 4 29 18

What is deteriorated ?

What should be improved?	14. Strength	15. Duration of moving object's operation	16. Duration of fixed object's operation	17. Temperature	18. Illumination	19. Energy expense of movable object	20. Energy expense of fixed object	21. Power	22. Waste of energy	23. Loss of substance	24. Loss of information	25. Waste of time	26. Quantity of substance
1. Weight of movable object	28 27 18 40	5 34 31 35		6 29 4 38	19 1 32	25 12 34 31		13 36 18 31	6 2 34 19	5 35 3 31	10 24 35	10 35 20 28	3 26 18 31
2. Weight of fixed object	28 2 10 27		2 27 19 6	28 19 32 22	35 19 35		18 19 28 1	15 19 18 22	18 19 28 15	5 8 13 30	10 15 35	10 20 35 26	19 6 18 26
3. Length of movable object	8 35 29 34	19		10 15 19	32	8 35 24		1 35 35 39	7 2 35 39	4 29 23 10	1 24 15 2	29	29 35
4. Length of fixed object	15 14 28 26		1 40 35	3 35 38 18	3 25			12 8	6 28	10 28 24 35	24 26	30 29 14	
5. Area of movable object	3 15 40 14	6 3		2 15 16	15 32 19 13	19 32		19 10 32 18	15 17 30 26	10 35 2 39	30 26	26 4	29 30 6 13
6. Area of fixed object	40		2 10 19 30	35 39 38				17 32	17 7 30	10 14 18 39	30 16	10 35 4 18	2 18 40 4
7. Volume of movable object	9 14 15 7	6 35 4		34 39 10 18	10 13 2	35		35 6 13 18	7 15 13 16	36 39 34 10	2 22	2 6 34 10	29 30 7
8. Volume of fixed object	9 14 17 15		35 34 38	35 6 4				30 6		10 39 35 34		35 16 32 18	35 3
9. Speed	8 3 26 14	3 19 35 5		28 30 36 2	10 13 19	8 15 35 38		19 35 38 2	14 20 19 35	10 13 28 38	13 26		10 19 29 38
10. Force	35 10 14 27	19 2		35 10 21		19 17 10	1 16 36 37	19 35 18 37	14 15	8 35 40 5		10 37 36	14 29 18 36
11. Stress, pressure	9 18 3 40	19 3 27		35 39 19 2		14 24 10 37		10 35 14	2 36 25	10 36 3 37		37 36 4	10 14 36
12. Shape	30 14 10 40	14 26 9 25		22 14 19 32	13 15 32	2 6 34 14		4 6 2	14	35 29 3 5		14 10 34 17	36 22
13. Object's composition	17 9 15	13 27 10 35	39 3 35 23	35 1 32	32 3 27 15	13 19	27 4 29 18	32 35 27 31	14 2 39 6	2 14 30 40		35 27	15 32 35
14. Strength		27 3 26		30 10 40	35 19	19 35 10	35	10 26 35 28	35	35 28 31 40		29 3 28 10	29 10 27
15. Duration of moving object's operation	27 3 10			19 35 39	2 19 4 35	28 6 35 18		19 10 35 38		28 27 3 18	10	20 10 28 18	3 35 10 40
16. Duration of fixed object's operation				19 18 36 40				16		27 16 18 38	10	28 20 10 16	3 35 31
17. Temperature	10 30 22 40	19 3 39	19 18 36 40		32 30 21 16	19 15 3 17		2 14 17 25	21 17 35 38	21 36 29 31		35 28 21 18	3 17 30 39
18. Illumination	35 19	2 19 6		32 35 19		32 1 19	32 35 1 15	32	19 16 1 6	13 1	1 6	19 1 26 17	1 19
19. Energy expense of movable object	5 19 9 35	28 35 6 18		19 24 3 14	2 15 19			6 19 37 18	12 22 15 24	35 24 18 5		35 38 19 18	34 23 16 18
20. Energy expense of fixed object	35				19 2 35 32					28 27 18 31			3 35 31

What is deteriorated ?

What should be improved?	27. Reliability	28. Measurement accuracy	29. Manufacturing precision	30. Harmful action at object	31. Harmful effect caused by the object	32. Ease of manufacture	33. Ease of operation	34. Ease of repair	35. Adaptation	36. Device complexity	37. Measurement or test complexity	38. Degree of automation	39. Productivity
1. Weight of movable object	3 11 1 27	28 27 35 26	28 35 26 18	22 21 18 27	22 35 31 39	27 28 1 36	35 3 2 24	2 27 28 11	29 5 15 8	26 30 36 34	28 29 26 32	26 35 18 19	35 3 24 37
2. Weight of fixed object	10 28 8 3	18 26 28	10 1 35 17	2 19 22 37	35 22 1 39	28 1 9	6 13 1 32	2 27 28 11	19 15 29	1 10 26 39	25 28 17 15	2 26 35	1 28 15 35
3. Length of movable object	10 14 29 40	28 32 4	10 28 29 37	1 15 17 24	17 15	1 29 17	15 29 35 4	1 28 10	14 15 1 16	1 19 26 24	19 35 26 24	17 24 26 16	14 4 28 29
4. Length of fixed object	15 29 28 3	32 28 3	2 32 10	1 18		15 17 27	2 25 3	3	1 35	1 26 26			30 14 7 26
5. Area of movable object	29 9	26 28 32 3	2 32	22 33 28 1	17 2 18 39	13 1 26 24	15 17 13 16	15 13 10 1	15 30	14 1 13	2 36 26 18	14 30 28 23	10 26 34 2
6. Area of fixed object	32 35 40 4	26 28 32 3	2 29 18 36	2 29 39 35	22 1 40	40 16	16 4	16	15 16	1 18 36	2 35 30 18	23	10 15 17 7
7. Volume of movable object	14 1 40 11	25 26 28	25 28 2 16	22 21 27 35	17 2 40 1	29 1 40	15 13 30 12	10	15 29	26 1	29 26 4	35 34 16 24	10 6 2 34
8. Volume of fixed object	2 35 16		35 10 25	34 39 19 27	30 18 35 4	35		1		1 31	2 17 26		35 37 10 2
9. Speed	11 35 27 28	28 32 1 24	10 28 32 25	1 28 35 23	2 24 35 21	35 13 8 1	32 28 13 12	34 2 28 27	15 10 26	10 28 4 34	3 34 27 16	10 18	
10. Force	3 35 13 21	35 10 23 24	28 29 37 36	1 35 40 18	13 3 36 24	15 37 18 1	1 28 3 25	15 1 11	15 17 18 20	26 35 10 18	36 37 10 19	2 35	3 28 35 37
11. Stress, pressure	10 13 19 35	6 28 25	3 35	22 2 37	2 33 27 18	1 35 16	11	2	35	19 1 35	2 36 37	35 24	10 14 35 37
12. Shape	10 40 16	28 32 1	32 30 40	22 1 2 35	35 1	1 32 17 28	32 15 26	2 13 1	1 15 29	16 29 1 28	15 13 39	15 1 32	17 26 34 10
13. Object's composition		13	18	35 24 18 30	35 40 27 39	35 19 32 39	32 35 30	2 15 10 16	35 30 34 2	2 35 22 26	35 22 39 23	1 8	23 35 40 3
14. Strength	11 3	3 27 16	3 27	18 35 37 1	15 35 22 2	11 3 10 32	32 40 28 2	27 11 3	15 3 2 3	2 13 28	27 3 15 40	15	29 35 10 14
15. Duration of moving object's operation	11 2 13	3	3 27 16 40	22 15 33 28	21 39 16 22	27 1 4	12 27	29 10 27	1 35 13	10 4 29 35	19 29 39 35	6 10	35 17 14 19
16. Duration of fixed object's operation	34 27 6 40	10 26 24		17 1 40 33	22	35 10	1	1	2		25 14 6 35	1	20 10 16 38
17. Temperature	19 35 3 10	32 19 24	24	22 33 35 2	22 35 2 24	26 27	26 27	4 10 16	2 18 27	2 17 16	3 27 35 31	26 2 19 16	15 28 35
18. Illumination		11 15 32	3 32	15 19	35 19 32 39	19 35 28 26	28 26 19	15 17 13 16	15 1 15 1	6 32 13	32 15 39 35	2 26 10	2 25 16
19. Energy expense of movable object	19 21 11 27	3 1 32		1 35 6 27	2 35 6	28 26 30	19 35	1 15 17 28	15 17 13 16	2 29 27 28	35 38	32 2	12 28 35
20. Energy expense of fixed object	10 36 23			10 2 22 37	19 22 18	1 4					19 35 16 25		1 6

What is deteriorated ?

What should be improved?	1. Weight of movable object	2. Weight of fixed object	3. Length of movable object	4. Length of fixed object	5. Area of movable object	6. Area of fixed object	7. Volume of movable object	8. Volume of fixed object	9. Speed	10. Force	11. Stress, pressure	12. Shape	13. Object's composition stability
21. Power	8 36 38 31	19 26 17 27	1 10 35 37		19 38	17 32 13 38	35 6 38	30 6 25	15 35 2	26 2 36 35	22 10 35	29 14 2 40	35 32 15 31
22. Waste of energy	15 6 19 28	19 6 18 9	7 2 6 13	6 38 7	15 26 17 30	17 7 30 18	7 18 23	7	16 35 38	36 38			14 2 39 6
23. Loss of substance	35 6 23 40	35 6 22 32	14 29 10 39	10 28 24	35 2 10 31	10 18 39 31	1 29 30 36	3 39 18 31	10 13 28 38	14 15 18 40	3 36 37 10	29 35 3 5	2 14 30 40
24. Loss of information	10 24 35	10 35 5	1 26	26	30 26	30 16		2 22	26 32				
25. Waste of time	10 20 37 35	10 20 26 5	15 2 29	30 24 14 5	26 4 5 16	10 35 17 4	2 5 34 10	35 16 32 18		10 37 36 5	36 37 4	4 10 34 17	35 3 22 5
26. Quantity of substance	35 6 18 31	27 26 18 35	29 14 35 18		15 14 29	2 18 40 4	15 20 29		35 29 34 28	35 14 3	10 36 14 3	35 14 16 11	15 2 17 40
27. Reliability	3 8 10 40	3 10 8 28	15 9 14 4	15 29 28 11	17 10 14 16	32 35 40 4	3 10 14 24	2 35 24	21 35 11 28	8 28 10 3	10 24 35 19	35 1 16 11	
28. Measurement accuracy	32 35 26 28	28 35 25 26	28 26 5 16	32 28 3 16	26 28 32 3	26 28 32 3	32 13 6		28 13 32 24	32 2	6 28 32	6 28 32	32 35 13
29. Manufacturing precision	28 32 13 18	28 35 27 9	10 28 29 37	2 32 10	28 33 29 32	2 29 18 36	32 28 2	25 10 35	10 28 32	28 19 34 36	3 35	32 30 40	30 18 30 18
30. Harmful action at object	22 21 27 39	2 22 13 24	17 1 39 4	1 18	22 1 33 28	27 2 39 35	22 23 37 35	34 39 19 27	21 22 35 28	13 35 39 18	22 2 37	22 1 3 35	35 24
31. Harmful effect caused by the object	19 22 15 39	35 22 1 39	17 15 16 22		17 2 18 39	22 1 40	17 2 40	30 18 35 4	35 28 3 23	35 28 1 40	2 33 27 18	35 1 1 37	35 40 27 39
32. Ease of manufacture	28 29 15 16	1 27 36 13	1 29 13 17	15 17 27	13 1 26 12	16 40	13 29 1 40	35	35 13 8 1	35 12	35 19 1 37	1 28 13 27	11 13 1
33. Ease of operation	25 2 13 15	6 13 1 25	1 17 13 12		1 17 13 16	18 16 15 39	1 16 35 15	4 18 39 31	18 13 34	28 13 35	2 32 12	15 34 29 28	32 35 30
34. Ease of repair	2 27 35 11	2 27 35 11	1 28 10 25	3 18 31	15 13 32	16 25 35 11	25 2 35 11	1	34 9	1 11 10	13	1 13 2 4	2 35
35. Adaptation	1 6 15 8	19 15 29 16	35 1 29 2	1 35 16	35 30 29 7	15 16	15 35 29		35 10 14	15 17 20	35 16	15 37 1 8	35 30 14
36. Device complexity	26 30 34 36	2 26 35 39	1 19 26 24	26	14 1 13 16	6 36	34 26 6	1 16	34 10 28	26 16	19 1 35	29 13 28 15	2 22 17 19
37. Measurement or test complexity	27 26 28 13	6 13 28 1	16 17 26 24	26	2 13 18 17	2 39 30 16	29 1 4 16	2 18 26 31	3 4 16 35	36 28 40 19	35 36 37 32	27 13 1 39	11 22 39 30
38. Degree of automation	28 26 18 35	28 26 35 10	14 13 28 17	23	17 14 13		35 13 16		28 10	2 35	13 35	15 32 1 13	18 1
39. Productivity	35 26 24 37	28 27 15 3	18 4 28 38	30 14 26 7	10 26 34 31	10 35 17 7	2 6 34 10	35 37 10 2		28 15 10 36	10 37 14	10 10 34 40	35 3 22 39

What is deteriorated ?

What should be improved?	14. Strength	15. Duration of moving object's operation	16. Duration of fixed object's operation	17. Temperature	18. Illumination	19. Energy expense of movable object	20. Energy expense of fixed object	21. Power	22. Waste of energy	23. Loss of substance	24. Loss of information	25. Waste of time	26. Quantity of substance
21. Power	26 10 28	19 35 10 38	16	2 14 17 25	16 6 19	16 6 19 37			10 35 38	28 27 18 38	10 19	35 20 10 6	4 34 19
22. Waste of energy	26			19 38 7	1 13 32 15			3 38		35 27 2 37	19 10	10 18 32 7	7 18 25
23. Loss of substance	35 28 31 40	28 27 3 18	27 16 18 38	21 36 39 31	1 6 13	35 18 24 5	28 27 12 31	28 27 18 38	35 27 2 31			15 18 35 10	6 3 10 24
24. Loss of information		10	10		19			10 19	19 10			24 26 28 32	24 28 35
25. Waste of time	29 3 28 18	20 10 28 18	28 20 10 16	35 29 21 18	1 19 26 17	35 38 19 18	1	35 20 10 6	10 5 18 32	35 18 10 39	24 26 28 32		35 38 18 16
26. Quantity of substance	14 35 34 10	3 35 10 40	3 35 31	3 17 39		34 29 16 18	3 35 31	35	7 18 25	6 3 10 24	24 28 35	35 38 18 16	
27. Reliability	11 28	2 35 3 25	34 27 6 40	3 35 10	11 32 13	21 17 27 19	36 23	21 11 26 31	10 11 35	10 35 29 39	10 28	10 30 4	21 28 40 3
28. Measurement accuracy	28 6 32	28 6 32	10 26 24	6 19 28 24	6 1 32	3 6 32		3 6 32	26 32 27	10 16 31 28		24 34 28 32	2 6 32
29. Manufacturing precision	3 27 40	3 27		19 26	3 32	32 2		32 2	13 32 2	35 31 10 24		32 26 28 18	32 30
30. Harmful action at object	18 35 37 1	22 15 33 28	17 1 40 33	22 33 35 2	1 19 32 13	1 24 6 27	10 2 22 37	19 22 31 2	21 22 35 2	33 22 19 40	22 10 2	35 18 34	35 33 29 31
31. Harmful effect caused by the object	15 35 22 2	15 22 33 31	21 39 16 22	22 35 2 24	19 24 39 32	2 35 6	19 22 18	2 35 18	21 35 22 2	10 1 34	10 21 29	1 22	3 24 39 1
32. Ease of manufacture	1 3 10 32	27 1 4	35 16	27 26 18	28 24 27 1	28 26 27 1	1 4	27 1 12 24	19 35 33	15 34 33	32 24 18 16	35 28 34 4	35 23 1 24
33. Ease of operation	32 40 3 28	29 3 8 25	1 16 25	26 27 13	13 17 1 24	1 13 24		35 34 2 10	2 19 13	28 32 2 24	4 10 27 22	4 28 10 34	12 35
34. Ease of repair	1 11 2 9	11 29 28 27	1	4 10	15 1 13	15 1 28 16		15 10 32 2	15 1 32 19	2 35 34 27		32 1 10 25	2 28 10 25
35. Adaptation	35 3 32 6	13 1 35	2 16	27 2 3 35	6 22 26 1	19 35 29 13		19 1 29	18 15 1	15 10 2 13		35 28 3 15	3 35 15
36. Device complexity	2 13 28	10 4 28 15		2 17 13	24 17 26	27 2 29 28		20 19 30 34	10 35 13 2	35 10 28 29		6 29	13 3 27 10
37. Measurement or test complexity	27 3 15 28	19 29 25 39	25 34 6 35	3 27 35 16	2 24 26	35 38	19 35 16	19 1 16 10	35 3 15 19	1 18 10 24	35 33 27 22	18 28 32 9	3 27 29 18
38. Degree of automation	25 13	6 9		26 2 19	8 32 19	2 32 13		28 2 27	23 28	35 10 18 5	35 33	24 28 35 30	35 13
39. Productivity	29 28 10 18	35 10 2 18	20 10 16 38	35 21 28 10	26 17 19 1	35 10 38 19	1	35 20 10	28 10 29 35	28 10 35 23	13 1 5 23		35 38

What is deteriorated ?

What should be improved?	27. Reliability	28. Measurement accuracy	29. Manufacturing precision	30. Harmful action at object	31. Harmful effect caused by the object	32. Ease of manufacture	33. Ease of operation	34. Ease of repair	35. Adaptation	36. Device complexity	37. Measurement or test complexity	38. Degree of automation	39. Productivity
21. Power	19 24 26 31	32 15 2	32 2	19 22 31 2	2 35 18	26 10 34	26 35 10	35 2 10 34	19 17 34	20 19 30 34	19 35 16	28 2 17	28 35 34
22. Waste of energy	11 10 35	32		21 22 35 2	21 35 2 22		35 32 1	2 19		7 23	35 3 15 23	2	28 10 29 35
23. Loss of substance	10 29 39 35	16 34 31 28	35 10 24 31	33 22 30 40	10 1 34 29	15 34 33	32 28 2 24	2 35 34 27	15 10 2	35 10 28 24	35 18 10 13	35 10 18	28 35 10 23
24. Loss of information	10 28 23			22 10 1	10 21 22	32	27 22				35 33	35	13 23 15
25. Waste of time	10 30 4	24 34 28 32	24 26 28 18	35 18 34	35 22 18 39	35 28 34 4	4 28 10 34	32 1 10	35 28 6	6 29 32 10	18 28 32 10	24 28 35 30	
26. Quantity of substance	18 3 28 40	3 2 28	33 30 33 30	35 33 29 31	3 35 40 39	29 1 35 27	35 29 10 25	2 32 10 25	15 3 29	3 13 27 10	3 27 29 18	8 35	13 29 3 27
27. Reliability		32 3 11 23	11 32 1	27 35 2 40	35 2 40 26		27 17 40	1 11	13 35 8 24	13 35 10 34	27 40 28	11 13 27	1 35 29 38
28. Measurement accuracy	5 11 1 23			28 24 22 26	3 33 39 10	6 35 25 18	1 13 17 34	1 32 13 11	13 35 2	27 35 10 34	26 24 32 28	28 2 10 34	10 34 28 32
29. Manufacturing precision	11 32 1			26 28 10 36	4 17 34 26		1 32 35 23	25 10		26 2 18		26 28 18 23	10 18 32 39
30. Harmful action at object	27 24 2 40	28 33 23 26	26 28 10 18			24 35 2	2 25 28 39	35 10 2	35 11 22 31	22 19 29 40	23 19 29 40	33 3 34	22 31 13 24
31. Harmful effect caused by the object	24 2 40 39	3 33 26	4 17 34 26							19 1 3 1	2 21 27 1	2	22 35 18 39
32. Ease of manufacture		1 35 12 18		24 2			2 5 13 16	35 1 11 9	2 13 15	27 26 1	6 28 11 1	8 28 1	35 1 10 28
33. Ease of operation	17 27 8 40	25 13 2 34	1 32 35 23	2 25 28 39		2 5 12		12 26 1 32	15 34 1 16	32 25 12 17		1 34 12 3	15 1 28
34. Ease of repair	11 10 1 16	10 2 13	25 10	35 10 2 16		1 35 11 10	1 12 26 15		7 1 4 16	35 1 13 11		34 35 7 13	1 32 10
35. Adaptation	35 13 8 24	35 5 1 10		35 11 32 31		1 13 31	15 34 1 16	1 16 7 4		15 29 37 28	1	27 34 35	35 28 6 37
36. Device complexity	13 35 1	2 26 10 34	26 24 32	22 19 29 40	19 1	27 26 1 13	27 926 24	1 13	29 15 28 37		15 10 37 28	15 1 24	12 17 28
37. Measurement or test complexity	27 40 28 8	26 24 32 28		22 19 29 28	2 21	5 28 11 29	2 5	12 26	1 15	15 10 37 28		34 21	35 18
38. Degree of automation	11 27 32	28 26 10 34	28 26 18 23	2 33 2		1 26 13	1 12 34 3	1 35 13	27 4 1 35	15 24 10 25	34 27 25		5 12 35 26
39. Productivity	1 35 10 38	1 10 34 28	32 1 18 10	22 35 13 24	35 22 18 39	35 28 2 24	1 28 7 19	1 32 10 25	1 35 28 37	12 17 28 24	35 18 27 2	5 12 35 26	