



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
94	99
85	
16	21
75	80
62	67

2)

Input	Output
3	27
8	72
9	81
5	45
4	

3)

Input	Output
43	55
75	87
62	74
77	
64	76

4)

Input	Output
	19
95	96
36	37
82	83
89	90

5)

Input	Output
25	12
85	72
57	44
62	49
	30

6)

Input	Output
24	3
	2
72	9
56	7
32	4

7)

In	4	5	9		8
Out	20	25	45	10	40

8)

In	3		9	4	6
Out	12	40	36	16	24

9)

In	56	21		42	63
Out	8	3	2	6	9

10)

In	2	4	5	8	9
Out	4	8		16	18

11)

In	12	24	48	54	30
Out	2	4	8	9	

12)

In	60	81	62	32	15
Out	57	78		29	12

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
94	99
85	90
16	21
75	80
62	67

Rule: Add 5

2)

Input	Output
3	27
8	72
9	81
5	45
4	36

Rule: Mult 9

3)

Input	Output
43	55
75	87
62	74
77	89
64	76

Rule: Add 12

4)

Input	Output
18	19
95	96
36	37
82	83
89	90

Rule: Add 1

5)

Input	Output
25	12
85	72
57	44
62	49
43	30

Rule: Sub 13

6)

Input	Output
24	3
16	2
72	9
56	7
32	4

Rule: Div 8

7)

In	4	5	9	2	8
Out	20	25	45	10	40

Rule: Mult 5

8)

In	3	10	9	4	6
Out	12	40	36	16	24

Rule: Mult 4

9)

In	56	21	14	42	63
Out	8	3	2	6	9

Rule: Div 7

10)

In	2	4	5	8	9
Out	4	8	10	16	18

Rule: Mult 2

11)

In	12	24	48	54	30
Out	2	4	8	9	5

Rule: Div 6

12)

In	60	81	62	32	15
Out	57	78	59	29	12

Rule: Sub 3

Answers

1. 90

2. 36

3. 89

4. 18

5. 43

6. 16

7. 2

8. 10

9. 14

10. 10

11. 5

12. 59



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
45	5
27	3
18	
81	9
63	7

2)

Input	Output
86	
45	30
94	79
32	17
70	55

3)

Input	Output
7	42
3	18
5	30
6	36
	60

4)

Input	Output
11	28
4	
31	48
6	23
87	104

5)

Input	Output
75	74
28	27
34	33
	88
35	34

6)

Input	Output
46	48
61	63
4	6
93	
75	77

7)

In	49	52	34		50
Out	45	48	30	57	46

8)

In		14	81	93	2
Out	58	30	97	109	18

9)

In	73	35	53	94	49
Out	81	43		102	57

10)

In	14	85	39	42	77
Out		73	27	30	65

11)

In	6	10	7	3	8
Out	48	80	56		64

12)

In	8	18	4	14	6
Out	4	9	2		3

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
45	5
27	3
18	2
81	9
63	7

Rule: Div 9

2)

Input	Output
86	71
45	30
94	79
32	17
70	55

Rule: Sub 15

3)

Input	Output
7	42
3	18
5	30
6	36
10	60

Rule: Mult 6

4)

Input	Output
11	28
4	21
31	48
6	23
87	104

Rule: Add 17

5)

Input	Output
75	74
28	27
34	33
89	88
35	34

Rule: Sub 1

6)

Input	Output
46	48
61	63
4	6
93	95
75	77

Rule: Add 2

7)

In	49	52	34	61	50
Out	45	48	30	57	46

Rule: Sub 4

8)

In	42	14	81	93	2
Out	58	30	97	109	18

Rule: Add 16

9)

In	73	35	53	94	49
Out	81	43	61	102	57

Rule: Add 8

10)

In	14	85	39	42	77
Out	2	73	27	30	65

Rule: Sub 12

11)

In	6	10	7	3	8
Out	48	80	56	24	64

Rule: Mult 8

12)

In	8	18	4	14	6
Out	4	9	2	7	3

Rule: Div 2

Answers1. 22. 713. 104. 215. 896. 957. 618. 429. 6110. 211. 2412. 7



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
89	81
10	2
87	
46	38
95	87

2)

Input	Output
86	101
84	99
34	49
95	
16	31

3)

Input	Output
13	
40	48
41	49
35	43
5	13

4)

Input	Output
39	41
26	28
20	
96	98
28	30

5)

Input	Output
49	7
63	9
70	
42	6
21	3

6)

Input	Output
86	77
41	32
57	48
35	26
	39

7)

In	35	45	10	40	30
Out	7		2	8	6

8)

In	5		2	4	8
Out	30	18	12	24	48

9)

In	5	6	7	10	4
Out	45	54		90	36

10)

In	16	6	18	14	8
Out	8	3	9		4

11)

In	89	43	93	67	25
Out	93	47	97	71	

12)

In	12	28	24		36
Out	3	7	6	10	9

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
89	81
10	2
87	79
46	38
95	87

Rule: Sub 8

2)

Input	Output
86	101
84	99
34	49
95	110
16	31

Rule: Add 15

3)

Input	Output
13	21
40	48
41	49
35	43
5	13

Rule: Add 8

4)

Input	Output
39	41
26	28
20	22
96	98
28	30

Rule: Add 2

5)

Input	Output
49	7
63	9
70	10
42	6
21	3

Rule: Div 7

6)

Input	Output
86	77
41	32
57	48
35	26
48	39

Rule: Sub 9

7)

In	35	45	10	40	30
Out	7	9	2	8	6

Rule: Div 5

8)

In	5	3	2	4	8
Out	30	18	12	24	48

Rule: Mult 6

9)

In	5	6	7	10	4
Out	45	54	63	90	36

Rule: Mult 9

10)

In	16	6	18	14	8
Out	8	3	9	7	4

Rule: Div 2

11)

In	89	43	93	67	25
Out	93	47	97	71	29

Rule: Add 4

12)

In	12	28	24	40	36
Out	3	7	6	10	9

Rule: Div 4

Answers

1. **79**

2. **110**

3. **21**

4. **22**

5. **10**

6. **48**

7. **9**

8. **3**

9. **63**

10. **7**

11. **29**

12. **40**



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
2	14
9	63
8	56
	28
3	21

2)

Input	Output
	5
64	8
72	9
56	7
24	3

3)

Input	Output
28	7
36	9
	2
40	10
20	5

4)

Input	Output
17	
11	20
37	46
65	74
73	82

5)

Input	Output
45	43
19	
62	60
79	77
11	9

6)

Input	Output
60	6
100	10
90	9
50	5
	8

7)

In	23	32		90	17
Out	19	28	9	86	13

8)

In	56		55	44	112
Out	40	49	39	28	96

9)

In	6	3	4	9	7
Out		15	20	45	35

10)

In	18	30	12	24	
Out	3	5	2	4	8

11)

In	4		10	9	2
Out	8	16	20	18	4

12)

In	38	40	82	60	107
Out	20		64	42	89

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
2	14
9	63
8	56
4	28
3	21

Rule: Mult 7

2)

Input	Output
40	5
64	8
72	9
56	7
24	3

Rule: Div 8

3)

Input	Output
28	7
36	9
8	2
40	10
20	5

Rule: Div 4

4)

Input	Output
17	26
11	20
37	46
65	74
73	82

Rule: Add 9

5)

Input	Output
45	43
19	17
62	60
79	77
11	9

Rule: Sub 2

6)

Input	Output
60	6
100	10
90	9
50	5
80	8

Rule: Div 10

7)

In	23	32	13	90	17
Out	19	28	9	86	13

Rule: Sub 4

8)

In	56	65	55	44	112
Out	40	49	39	28	96

Rule: Sub 16

9)

In	6	3	4	9	7
Out	30	15	20	45	35

Rule: Mult 5

10)

In	18	30	12	24	48
Out	3	5	2	4	8

Rule: Div 6

11)

In	4	8	10	9	2
Out	8	16	20	18	4

Rule: Mult 2

12)

In	38	40	82	60	107
Out	20	22	64	42	89

Rule: Sub 18

Answers1. 42. 403. 84. 265. 176. 807. 138. 659. 3010. 4811. 812. 22



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
27	9
	8
15	5
6	2
9	3

2)

Input	Output
40	
15	3
30	6
10	2
45	9

3)

Input	Output
	45
90	95
46	51
87	92
11	16

4)

Input	Output
32	8
16	4
24	6
28	7
36	

5)

Input	Output
57	46
29	18
59	48
	10
65	54

6)

Input	Output
9	54
6	36
8	
7	42
5	30

7)

In	5		3	4	10
Out	50	60	30	40	100

8)

In	5	3	10		9
Out	10	6	20	12	18

9)

In	77	29	90	35	118
Out	57	9	70	15	

10)

In	79	39	12	23	55
Out	99	59	32	43	

11)

In	72		32	40	48
Out	9	3	4	5	6

12)

In	50	36	77	67	23
Out	62	48		79	35

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
27	9
24	8
15	5
6	2
9	3

Rule: Div 3

2)

Input	Output
40	8
15	3
30	6
10	2
45	9

Rule: Div 5

3)

Input	Output
40	45
90	95
46	51
87	92
11	16

Rule: Add 5

4)

Input	Output
32	8
16	4
24	6
28	7
36	9

Rule: Div 4

5)

Input	Output
57	46
29	18
59	48
21	10
65	54

Rule: Sub 11

6)

Input	Output
9	54
6	36
8	48
7	42
5	30

Rule: Mult 6

7)

In	5	6	3	4	10
Out	50	60	30	40	100

Rule: Mult 10

8)

In	5	3	10	6	9
Out	10	6	20	12	18

Rule: Mult 2

9)

In	77	29	90	35	118
Out	57	9	70	15	98

Rule: Sub 20

10)

In	79	39	12	23	55
Out	99	59	32	43	75

Rule: Add 20

11)

In	72	24	32	40	48
Out	9	3	4	5	6

Rule: Div 8

12)

In	50	36	77	67	23
Out	62	48	89	79	35

Rule: Add 12

Answers

1. 24

2. 8

3. 40

4. 9

5. 21

6. 48

7. 6

8. 6

9. 98

10. 75

11. 24

12. 89



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
9	
5	35
8	56
7	49
3	21

2)

Input	Output
2	16
8	64
5	40
4	32
6	

3)

Input	Output
3	12
8	
2	8
4	16
10	40

4)

Input	Output
57	56
68	67
98	97
29	28
	57

5)

Input	Output
35	45
91	101
36	46
67	77
	17

6)

Input	Output
8	26
45	63
36	54
32	50
27	

7)

In	14	12	18	20	6
Out	7		9	10	3

8)

In	54	81	63	72	36
Out	6	9		8	4

9)

In	49	95	45	63	99
Out		91	41	59	95

10)

In	97	38	49	19	4
Out	116	57	68		23

11)

In	58	18		53	78
Out	50	10	66	45	70

12)

In		52	93	85	50
Out	83	69	110	102	67

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
9	63
5	35
8	56
7	49
3	21

Rule: Mult 7

2)

Input	Output
2	16
8	64
5	40
4	32
6	48

Rule: Mult 8

3)

Input	Output
3	12
8	32
2	8
4	16
10	40

Rule: Mult 4

4)

Input	Output
57	56
68	67
98	97
29	28
58	57

Rule: Sub 1

5)

Input	Output
35	45
91	101
36	46
67	77
7	17

Rule: Add 10

6)

Input	Output
8	26
45	63
36	54
32	50
27	45

Rule: Add 18

7)

In	14	12	18	20	6
Out	7	6	9	10	3

Rule: Div 2

8)

In	54	81	63	72	36
Out	6	9	7	8	4

Rule: Div 9

9)

In	49	95	45	63	99
Out	45	91	41	59	95

Rule: Sub 4

10)

In	97	38	49	19	4
Out	116	57	68	38	23

Rule: Add 19

11)

In	58	18	74	53	78
Out	50	10	66	45	70

Rule: Sub 8

12)

In	66	52	93	85	50
Out	83	69	110	102	67

Rule: Add 17

Answers

1. 63

2. 48

3. 32

4. 58

5. 7

6. 45

7. 6

8. 7

9. 45

10. 38

11. 74

12. 66



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
6	3
18	9
4	2
10	5
	7

2)

Input	Output
48	67
6	25
45	64
62	81
67	

3)

Input	Output
53	54
14	15
7	8
51	
31	32

4)

Input	Output
10	50
4	20
3	15
9	
2	10

5)

Input	Output
	49
97	79
77	59
102	84
85	67

6)

Input	Output
105	
75	59
63	47
82	66
91	75

7)

In	4		7	3	9
Out	40	50	70	30	90

8)

In	60		24	48	42
Out	10	3	4	8	7

9)

In	3	2	9	7	10
Out	24	16	72	56	

10)

In	9	43		55	81
Out	22	56	67	68	94

11)

In	60	65	33		83
Out	44	49	17	96	67

12)

In	9	10		4	5
Out	27	30	21	12	15

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
6	3
18	9
4	2
10	5
14	7

Rule: Div 2

2)

Input	Output
48	67
6	25
45	64
62	81
67	86

Rule: Add 19

3)

Input	Output
53	54
14	15
7	8
51	52
31	32

Rule: Add 1

4)

Input	Output
10	50
4	20
3	15
9	45
2	10

Rule: Mult 5

5)

Input	Output
67	49
97	79
77	59
102	84
85	67

Rule: Sub 18

6)

Input	Output
105	89
75	59
63	47
82	66
91	75

Rule: Sub 16

7)

In	4	5	7	3	9
Out	40	50	70	30	90

Rule: Mult 10

8)

In	60	18	24	48	42
Out	10	3	4	8	7

Rule: Div 6

9)

In	3	2	9	7	10
Out	24	16	72	56	80

Rule: Mult 8

10)

In	9	43	54	55	81
Out	22	56	67	68	94

Rule: Add 13

11)

In	60	65	33	112	83
Out	44	49	17	96	67

Rule: Sub 16

12)

In	9	10	7	4	5
Out	27	30	21	12	15

Rule: Mult 3

Answers

1. 14

2. 86

3. 52

4. 45

5. 67

6. 89

7. 5

8. 18

9. 80

10. 54

11. 112

12. 7



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
102	
26	11
49	34
101	86
37	22

2)

Input	Output
12	3
28	7
20	5
32	8
8	

3)

Input	Output
7	35
	10
3	15
6	30
10	50

4)

Input	Output
8	
7	42
6	36
4	24
10	60

5)

Input	Output
92	97
89	94
84	89
90	95
	54

6)

Input	Output
2	6
3	9
8	24
	12
6	18

7)

In	48	37	7	95	70
Out	54		13	101	76

8)

In	64	75	9	100	39
Out	56	67	1	92	

9)

In	35	65	83	67	57
Out	36	66	84		58

10)

In	81	22	48		51
Out	63	4	30	87	33

11)

In		4	2	5	3
Out	80	40	20	50	30

12)

In	96	77	68		65
Out	93	74	65	2	62

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
102	87
26	11
49	34
101	86
37	22

Rule: Sub 15

2)

Input	Output
12	3
28	7
20	5
32	8
8	2

Rule: Div 4

3)

Input	Output
7	35
2	10
3	15
6	30
10	50

Rule: Mult 5

4)

Input	Output
8	48
7	42
6	36
4	24
10	60

Rule: Mult 6

5)

Input	Output
92	97
89	94
84	89
90	95
49	54

Rule: Add 5

6)

Input	Output
2	6
3	9
8	24
4	12
6	18

Rule: Mult 3

7)

In	48	37	7	95	70
Out	54	43	13	101	76

Rule: Add 6

8)

In	64	75	9	100	39
Out	56	67	1	92	31

Rule: Sub 8

9)

In	35	65	83	67	57
Out	36	66	84	68	58

Rule: Add 1

10)

In	81	22	48	105	51
Out	63	4	30	87	33

Rule: Sub 18

11)

In	8	4	2	5	3
Out	80	40	20	50	30

Rule: Mult 10

12)

In	96	77	68	5	65
Out	93	74	65	2	62

Rule: Sub 3

Answers

1. 87

2. 2

3. 2

4. 48

5. 49

6. 4

7. 43

8. 31

9. 68

10. 105

11. 8

12. 5



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
10	5
18	9
12	6
6	
16	8

2)

Input	Output
	18
3	9
7	21
5	15
10	30

3)

Input	Output
	60
7	70
8	80
5	50
4	40

4)

Input	Output
20	5
32	8
	4
8	2
28	7

5)

Input	Output
3	18
4	
2	12
5	30
9	54

6)

Input	Output
23	6
85	
25	8
95	78
21	4

7)

In	94		51	27	93
Out	86	58	43	19	85

8)

In	21	56	70	16	47
Out	30		79	25	56

9)

In	32	24	48		64
Out	4	3	6	7	8

10)

In	5	2	8		10
Out	35	14	56	63	70

11)

In		57	87	102	92
Out	49	44	74	89	79

12)

In	19	42		89	70
Out	25	48	39	95	76

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
10	5
18	9
12	6
6	3
16	8

Rule: Div 2

2)

Input	Output
6	18
3	9
7	21
5	15
10	30

Rule: Mult 3

3)

Input	Output
6	60
7	70
8	80
5	50
4	40

Rule: Mult 10

4)

Input	Output
20	5
32	8
16	4
8	2
28	7

Rule: Div 4

5)

Input	Output
3	18
4	24
2	12
5	30
9	54

Rule: Mult 6

6)

Input	Output
23	6
85	68
25	8
95	78
21	4

Rule: Sub 17

7)

In	94	66	51	27	93
Out	86	58	43	19	85

Rule: Sub 8

8)

In	21	56	70	16	47
Out	30	65	79	25	56

Rule: Add 9

9)

In	32	24	48	56	64
Out	4	3	6	7	8

Rule: Div 8

10)

In	5	2	8	9	10
Out	35	14	56	63	70

Rule: Mult 7

11)

In	62	57	87	102	92
Out	49	44	74	89	79

Rule: Sub 13

12)

In	19	42	33	89	70
Out	25	48	39	95	76

Rule: Add 6

Answers

1. 3

2. 6

3. 6

4. 16

5. 24

6. 68

7. 66

8. 65

9. 56

10. 9

11. 62

12. 33



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
32	4
24	3
80	10
16	
56	7

2)

Input	Output
106	86
28	8
82	62
	81
71	51

3)

Input	Output
64	75
	101
85	96
20	31
74	85

4)

Input	Output
	3
14	2
35	5
63	9
70	10

5)

Input	Output
85	87
35	37
46	48
87	89
54	

6)

Input	Output
6	12
8	16
10	20
	14
2	4

7)

In	52	33	69		104
Out	47	28	64	97	99

8)

In	72	27	90	81	18
Out	8	3	10	9	

9)

In	18		24	27	21
Out	6	5	8	9	7

10)

In	15	12	41	48	60
Out	9	6	35		54

11)

In	2	10	6	4	
Out	20	100	60	40	30

12)

In	9	4	3	10	2
Out	45		15	50	10

Answers

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



Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
32	4
24	3
80	10
16	2
56	7

Rule: Div 8

2)

Input	Output
106	86
28	8
82	62
101	81
71	51

Rule: Sub 20

3)

Input	Output
64	75
90	101
85	96
20	31
74	85

Rule: Add 11

4)

Input	Output
21	3
14	2
35	5
63	9
70	10

Rule: Div 7

5)

Input	Output
85	87
35	37
46	48
87	89
54	56

Rule: Add 2

6)

Input	Output
6	12
8	16
10	20
7	14
2	4

Rule: Mult 2

7)

In	52	33	69	102	104
Out	47	28	64	97	99

Rule: Sub 5

8)

In	72	27	90	81	18
Out	8	3	10	9	2

Rule: Div 9

9)

In	18	15	24	27	21
Out	6	5	8	9	7

Rule: Div 3

10)

In	15	12	41	48	60
Out	9	6	35	42	54

Rule: Sub 6

11)

In	2	10	6	4	3
Out	20	100	60	40	30

Rule: Mult 10

12)

In	9	4	3	10	2
Out	45	20	15	50	10

Rule: Mult 5

Answers

1. 2

2. 101

3. 90

4. 21

5. 56

6. 7

7. 102

8. 2

9. 15

10. 42

11. 3

12. 20