



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

1)

Input	Output
56	8
28	4
49	7
	5
42	6

2)

Input	Output
9	63
10	70
3	21
8	56
	14

3)

Input	Output
8	24
10	26
	21
2	18
4	20

4)

Input	Output
5	
3	23
9	29
4	24
8	28

5)

Input	Output
8	32
10	
7	28
5	20
2	8

6)

Input	Output
9	3
11	5
15	9
14	8
16	

7)

In	12	9	5	13
Out	9	6	2	10

8)

In	5	2	6	9
Out	45	18	54	81

9)

In	56	64	48	32
Out	7	8		4

10)

In	9		8	7
Out	12	6	11	10

11)

In	18	60	24	12
Out	3	10	4	2

12)

In	9	7	2	5
Out	45		10	25

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
56	8
28	4
49	7
35	5
42	6

Rule: Div by 7

2)

Input	Output
9	63
10	70
3	21
8	56
2	14

Rule: Mult by 7

3)

Input	Output
8	24
10	26
5	21
2	18
4	20

Rule: Add 16

4)

Input	Output
5	25
3	23
9	29
4	24
8	28

Rule: Add 20

5)

Input	Output
8	32
10	40
7	28
5	20
2	8

Rule: Mult by 4

6)

Input	Output
9	3
11	5
15	9
14	8
16	10

Rule: Sub 6

7)

In	12	9	5	13
Out	9	6	2	10

Rule: Sub 3

8)

In	5	2	6	9
Out	45	18	54	81

Rule: Mult by 9

9)

In	56	64	48	32
Out	7	8	6	4

Rule: Div by 8

10)

In	9	3	8	7
Out	12	6	11	10

Rule: Add 3

11)

In	18	60	24	12
Out	3	10	4	2

Rule: Div by 6

12)

In	9	7	2	5
Out	45	35	10	25

Rule: Mult by 5

Answers

1. 35

2. 2

3. 5

4. 25

5. 40

6. 10

7. 3

8. 7

9. 6

10. 3

11. 54

12. 35



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

1)

Input	Output
14	2
56	8
49	7
63	9
	6

2)

Input	Output
2	7
3	8
5	10
9	14
	15

3)

Input	Output
3	15
4	20
9	
5	25
6	30

4)

Input	Output
13	6
14	7
	9
15	8
12	5

5)

Input	Output
11	6
8	
9	4
13	8
14	9

6)

Input	Output
2	6
5	15
3	9
7	21
	27

7)

In	4		3	7
Out	8	12	7	11

8)

In	2	10	5	3
Out	6	14	9	7

9)

In	24	40	80	
Out	3	5	10	6

10)

In	23	24	21	17
Out	9	10	7	3

11)

In	60	30	40	50
Out		3	4	5

12)

In	9	7	5	11
Out	8	6	4	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
14	2
56	8
49	7
63	9
42	6

Rule: Div by 7

2)

Input	Output
2	7
3	8
5	10
9	14
10	15

Rule: Add 5

3)

Input	Output
3	15
4	20
9	45
5	25
6	30

Rule: Mult by 5

4)

Input	Output
13	6
14	7
16	9
15	8
12	5

Rule: Sub 7

5)

Input	Output
11	6
8	3
9	4
13	8
14	9

Rule: Sub 5

6)

Input	Output
2	6
5	15
3	9
7	21
9	27

Rule: Mult by 3

7)

In	4	8	3	7
Out	8	12	7	11

Rule: Add 4

8)

In	2	10	5	3
Out	6	14	9	7

Rule: Add 4

9)

In	24	40	80	48
Out	3	5	10	6

Rule: Div by 8

10)

In	23	24	21	17
Out	9	10	7	3

Rule: Sub 14

11)

In	60	30	40	50
Out	6	3	4	5

Rule: Div by 10

12)

In	9	7	5	11
Out	8	6	4	10

Rule: Sub 1

Answers1. 422. 103. 454. 165. 36. 97. 88. 79. 4810. 211. 612. 3



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

1)

Input	Output
3	12
9	36
5	20
	40
7	28

2)

Input	Output
8	13
4	9
9	
7	12
5	10

3)

Input	Output
7	21
	27
4	12
2	6
5	15

4)

Input	Output
29	10
25	6
	9
21	2
26	7

5)

Input	Output
20	4
	9
25	5
40	8
50	10

6)

Input	Output
36	4
54	6
	10
45	5
72	8

7)

In	16		20	12
Out	8	5	10	6

8)

In	5	8	2	7
Out	50		20	70

9)

In		9	10	8
Out	8	15	16	14

10)

In	5	10	11	8
Out	4	9	10	7

11)

In	10	8		9
Out	30	24	9	27

12)

In	22	20	19	17
Out	8	6	5	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
3	12
9	36
5	20
10	40
7	28

Rule: Mult by 4

2)

Input	Output
8	13
4	9
9	14
7	12
5	10

Rule: Add 5

3)

Input	Output
7	21
9	27
4	12
2	6
5	15

Rule: Mult by 3

4)

Input	Output
29	10
25	6
28	9
21	2
26	7

Rule: Sub 19

5)

Input	Output
20	4
45	9
25	5
40	8
50	10

Rule: Div by 5

6)

Input	Output
36	4
54	6
90	10
45	5
72	8

Rule: Div by 9

7)

In	16	10	20	12
Out	8	5	10	6

Rule: Div by 2

8)

In	5	8	2	7
Out	50	80	20	70

Rule: Mult by 10

9)

In	2	9	10	8
Out	8	15	16	14

Rule: Add 6

10)

In	5	10	11	8
Out	4	9	10	7

Rule: Sub 1

11)

In	10	8	3	9
Out	30	24	9	27

Rule: Mult by 3

12)

In	22	20	19	17
Out	8	6	5	3

Rule: Sub 14

Answers1. 102. 143. 94. 285. 456. 907. 108. 809. 210. 311. 312. 10



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

1)

Input	Output
18	4
21	7
22	
19	5
20	6

2)

Input	Output
3	10
5	12
6	13
9	16
2	

3)

Input	Output
10	14
4	
3	7
9	13
7	11

4)

Input	Output
11	8
5	
6	3
12	9
9	6

5)

Input	Output
20	10
16	8
4	2
18	9
14	

6)

Input	Output
7	28
8	32
3	12
10	40
	24

7)

In	19		16	13
Out	10	9	7	4

8)

In	2	3	8	
Out	12	18	48	54

9)

In	15	21	27	
Out	5	7	9	8

10)

In	8	3	5	6
Out		22	24	25

11)

In	4	6	10	2
Out	32	48		16

12)

In	23	27	25	26
Out	3	7		6

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
18	4
21	7
22	8
19	5
20	6

Rule: Sub 14

2)

Input	Output
3	10
5	12
6	13
9	16
2	9

Rule: Add 7

3)

Input	Output
10	14
4	8
3	7
9	13
7	11

Rule: Add 4

4)

Input	Output
11	8
5	2
6	3
12	9
9	6

Rule: Sub 3

5)

Input	Output
20	10
16	8
4	2
18	9
14	7

Rule: Div by 2

6)

Input	Output
7	28
8	32
3	12
10	40
6	24

Rule: Mult by 4

7)

In	19	18	16	13
Out	10	9	7	4

Rule: Sub 9

8)

In	2	3	8	9
Out	12	18	48	54

Rule: Mult by 6

9)

In	15	21	27	24
Out	5	7	9	8

Rule: Div by 3

10)

In	8	3	5	6
Out	27	22	24	25

Rule: Add 19

11)

In	4	6	10	2
Out	32	48	80	16

Rule: Mult by 8

12)

In	23	27	25	26
Out	3	7	5	6

Rule: Sub 20

Answers1. 82. 93. 84. 25. 76. 67. 188. 99. 2410. 2711. 8012. 5



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

1)

Input	Output
36	6
48	8
24	
30	5
54	9

2)

Input	Output
8	
6	48
7	56
2	16
10	80

3)

Input	Output
8	56
5	35
9	63
6	42
	21

4)

Input	Output
20	3
24	7
19	2
23	
26	9

5)

Input	Output
14	8
	7
16	10
15	9
8	2

6)

Input	Output
28	9
21	2
	10
22	3
27	8

7)

In	10	7	4	6
Out	17	14		13

8)

In	20	4		16
Out	10	2	6	8

9)

In	23	21		20
Out	10	8	6	7

10)

In	6		8	5
Out	36	12	48	30

11)

In	45	30	20	10
Out	9	6	4	

12)

In	6	10	8	9
Out		24	22	23

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
36	6
48	8
24	4
30	5
54	9

Rule: Div by 6

2)

Input	Output
8	64
6	48
7	56
2	16
10	80

Rule: Mult by 8

3)

Input	Output
8	56
5	35
9	63
6	42
3	21

Rule: Mult by 7

4)

Input	Output
20	3
24	7
19	2
23	6
26	9

Rule: Sub 17

5)

Input	Output
14	8
13	7
16	10
15	9
8	2

Rule: Sub 6

6)

Input	Output
28	9
21	2
29	10
22	3
27	8

Rule: Sub 19

7)

In	10	7	4	6
Out	17	14	11	13

Rule: Add 7

8)

In	20	4	12	16
Out	10	2	6	8

Rule: Div by 2

9)

In	23	21	19	20
Out	10	8	6	7

Rule: Sub 13

10)

In	6	2	8	5
Out	36	12	48	30

Rule: Mult by 6

11)

In	45	30	20	10
Out	9	6	4	2

Rule: Div by 5

12)

In	6	10	8	9
Out	20	24	22	23

Rule: Add 14

Answers1. 42. 643. 34. 65. 136. 297. 118. 129. 1910. 211. 212. 20



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

1)

Input	Output
3	23
6	
10	30
5	25
9	29

2)

Input	Output
30	5
48	8
18	3
	10
54	9

3)

Input	Output
30	3
20	
70	7
90	9
60	6

4)

Input	Output
	17
8	15
5	12
3	10
2	9

5)

Input	Output
64	8
80	
56	7
40	5
48	6

6)

Input	Output
10	90
	36
2	18
6	54
7	63

7)

In	8	9	7	6
Out	27	28	26	

8)

In	18	24	23	19
Out	2	8	7	3

9)

In		2	10	4
Out	18	6	30	12

10)

In	8	9	10	5
Out	7	8		4

11)

In	40	45	50	10
Out	8		10	2

12)

In	8	10	7	6
Out	32		28	24

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
3	23
6	26
10	30
5	25
9	29

Rule: Add 20

2)

Input	Output
30	5
48	8
18	3
60	10
54	9

Rule: Div by 6

3)

Input	Output
30	3
20	2
70	7
90	9
60	6

Rule: Div by 10

4)

Input	Output
10	17
8	15
5	12
3	10
2	9

Rule: Add 7

5)

Input	Output
64	8
80	10
56	7
40	5
48	6

Rule: Div by 8

6)

Input	Output
10	90
4	36
2	18
6	54
7	63

Rule: Mult by 9

7)

In	8	9	7	6
Out	27	28	26	25

Rule: Add 19

8)

In	18	24	23	19
Out	2	8	7	3

Rule: Sub 16

9)

In	6	2	10	4
Out	18	6	30	12

Rule: Mult by 3

10)

In	8	9	10	5
Out	7	8	9	4

Rule: Sub 1

11)

In	40	45	50	10
Out	8	9	10	2

Rule: Div by 5

12)

In	8	10	7	6
Out	32	40	28	24

Rule: Mult by 4

Answers1. 262. 603. 24. 105. 106. 47. 258. 229. 610. 911. 912. 40



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

1)

Input	Output
5	45
7	63
2	
9	81
4	36

2)

Input	Output
6	3
10	7
11	8
12	9
8	

3)

Input	Output
	3
72	9
48	6
16	2
80	10

4)

Input	Output
8	48
3	18
7	42
	36
2	12

5)

Input	Output
5	10
	8
9	18
10	20
2	4

6)

Input	Output
5	14
3	12
6	15
4	
2	11

7)

In	16	10	18	
Out	8	2	10	9

8)

In	6		10	4
Out	42	21	70	28

9)

In	11	8	7	4
Out	9		5	2

10)

In		6	2	8
Out	21	17	13	19

11)

In	8		2	3
Out	16	13	10	11

12)

In	50	30	20	25
Out	10	6		5

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
5	45
7	63
2	18
9	81
4	36

Rule: Mult by 9

2)

Input	Output
6	3
10	7
11	8
12	9
8	5

Rule: Sub 3

3)

Input	Output
24	3
72	9
48	6
16	2
80	10

Rule: Div by 8

4)

Input	Output
8	48
3	18
7	42
6	36
2	12

Rule: Mult by 6

5)

Input	Output
5	10
4	8
9	18
10	20
2	4

Rule: Mult by 2

6)

Input	Output
5	14
3	12
6	15
4	13
2	11

Rule: Add 9

7)

In	16	10	18	17
Out	8	2	10	9

Rule: Sub 8

8)

In	6	3	10	4
Out	42	21	70	28

Rule: Mult by 7

9)

In	11	8	7	4
Out	9	6	5	2

Rule: Sub 2

10)

In	10	6	2	8
Out	21	17	13	19

Rule: Add 11

11)

In	8	5	2	3
Out	16	13	10	11

Rule: Add 8

12)

In	50	30	20	25
Out	10	6	4	5

Rule: Div by 5

Answers

1. 18

2. 5

3. 24

4. 6

5. 4

6. 13

7. 17

8. 3

9. 6

10. 10

11. 5

12. 4



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

Answers

1)

Input	Output
6	
13	9
7	3
10	6
9	5

2)

Input	Output
10	29
6	25
4	23
8	27
	28

3)

Input	Output
9	11
5	7
7	9
	6
2	4

4)

Input	Output
3	19
10	26
5	
9	25
2	18

5)

Input	Output
5	22
6	23
4	21
8	25
3	

6)

Input	Output
16	
13	6
14	7
10	3
15	8

7)

In	42	60	48	30
Out	7		8	5

8)

In		4	8	7
Out	42	28	56	49

9)

In		3	2	7
Out	25	15	10	35

10)

In	25	22		23
Out	9	6	3	7

11)

In	20	18	8	10
Out	10	9	4	

12)

In	3	7		4
Out	9	21	15	12

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	2
13	9
7	3
10	6
9	5

Rule: Sub 4

2)

Input	Output
10	29
6	25
4	23
8	27
9	28

Rule: Add 19

3)

Input	Output
9	11
5	7
7	9
4	6
2	4

Rule: Add 2

4)

Input	Output
3	19
10	26
5	21
9	25
2	18

Rule: Add 16

5)

Input	Output
5	22
6	23
4	21
8	25
3	20

Rule: Add 17

6)

Input	Output
16	9
13	6
14	7
10	3
15	8

Rule: Sub 7

7)

In	42	60	48	30
Out	7	10	8	5

Rule: Div by 6

8)

In	6	4	8	7
Out	42	28	56	49

Rule: Mult by 7

9)

In	5	3	2	7
Out	25	15	10	35

Rule: Mult by 5

10)

In	25	22	19	23
Out	9	6	3	7

Rule: Sub 16

11)

In	20	18	8	10
Out	10	9	4	5

Rule: Div by 2

12)

In	3	7	5	4
Out	9	21	15	12

Rule: Mult by 3

Answers1. 22. 93. 44. 215. 206. 97. 108. 69. 510. 1911. 512. 5



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

Answers

1)

Input	Output
10	14
5	9
	11
4	8
2	6

2)

Input	Output
32	4
16	2
	10
72	9
40	5

3)

Input	Output
70	7
90	
40	4
60	6
80	8

4)

Input	Output
80	
56	7
72	9
48	6
40	5

5)

Input	Output
15	4
13	2
21	
18	7
16	5

6)

Input	Output
12	7
9	4
14	9
10	
7	2

7)

In	63	27	45	36
Out	7	3	5	

8)

In	3	7	5	4
Out	12	16		13

9)

In	9	7	10	5
Out		35	50	25

10)

In	6	4	7	8
Out	26		27	28

11)

In	17	19	13	18
Out	6	8		7

12)

In	7	3	6	4
Out	10	6	9	7

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	14
5	9
7	11
4	8
2	6

Rule: Add 4

2)

Input	Output
32	4
16	2
80	10
72	9
40	5

Rule: Div by 8

3)

Input	Output
70	7
90	9
40	4
60	6
80	8

Rule: Div by 10

4)

Input	Output
80	10
56	7
72	9
48	6
40	5

Rule: Div by 8

5)

Input	Output
15	4
13	2
21	10
18	7
16	5

Rule: Sub 11

6)

Input	Output
12	7
9	4
14	9
10	5
7	2

Rule: Sub 5

7)

In	63	27	45	36
Out	7	3	5	4

Rule: Div by 9

8)

In	3	7	5	4
Out	12	16	14	13

Rule: Add 9

9)

In	9	7	10	5
Out	45	35	50	25

Rule: Mult by 5

10)

In	6	4	7	8
Out	26	24	27	28

Rule: Add 20

11)

In	17	19	13	18
Out	6	8	2	7

Rule: Sub 11

12)

In	7	3	6	4
Out	10	6	9	7

Rule: Add 3

Answers

1. 7

2. 80

3. 9

4. 10

5. 10

6. 5

7. 4

8. 14

9. 45

10. 24

11. 2

12. 8



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

1)

Input	Output
	10
9	16
4	11
2	9
6	13

2)

Input	Output
22	5
21	4
25	8
19	2
	3

3)

Input	Output
19	2
21	4
20	3
25	8
	7

4)

Input	Output
3	30
5	
10	100
6	60
2	20

5)

Input	Output
10	
5	15
6	16
3	13
2	12

6)

Input	Output
5	50
10	100
2	20
	90
6	60

7)

In	17	24	21	23
Out	2	9	6	

8)

In	2	6	5	7
Out	4	12		14

9)

In	6	27	18	21
Out	2	9	6	7

10)

In	32	28	12	36
Out	8	7	3	9

11)

In	21	18	15	27
Out	7	6		9

12)

In	5	10	3	4
Out	24	29		23

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
3	10
9	16
4	11
2	9
6	13

Rule: Add 7

2)

Input	Output
22	5
21	4
25	8
19	2
20	3

Rule: Sub 17

3)

Input	Output
19	2
21	4
20	3
25	8
24	7

Rule: Sub 17

4)

Input	Output
3	30
5	50
10	100
6	60
2	20

Rule: Mult by 10

5)

Input	Output
10	20
5	15
6	16
3	13
2	12

Rule: Add 10

6)

Input	Output
5	50
10	100
2	20
9	90
6	60

Rule: Mult by 10

7)

In	17	24	21	23
Out	2	9	6	8

Rule: Sub 15

8)

In	2	6	5	7
Out	4	12	10	14

Rule: Mult by 2

9)

In	6	27	18	21
Out	2	9	6	7

Rule: Div by 3

10)

In	32	28	12	36
Out	8	7	3	9

Rule: Div by 4

11)

In	21	18	15	27
Out	7	6	5	9

Rule: Div by 3

12)

In	5	10	3	4
Out	24	29	22	23

Rule: Add 19

Answers1. 32. 203. 244. 505. 206. 97. 88. 109. 2410. 1011. 512. 22