



Determine what rule the function machine is using.

Answers

1)

Input (p)	Output (y)
54	44
26	16
44	34
56	46
36	26

2)

Input (n)	Output (b)
52	40
25	13
39	27
60	48
42	30

3)

Input (m)	Output (i)
19	26
10	17
30	37
24	31
23	30

4)

Input (t)	Output (r)
37	26
28	17
43	32
56	45
57	46

5)

Input (i)	Output (a)
23	29
42	48
47	53
45	51
16	22

6)

Input (b)	Output (h)
53	44
40	31
32	23
21	12
55	46

7)

In (u)	10	46	16	50
Out (i)	23	59	29	63

8)

In (w)	39	20	54	35
Out (b)	31	12	46	27

9)

In (i)	44	25	10	15
Out (y)	57	38	23	28

10)

In (v)	45	55	52	60
Out (p)	35	45	42	50

11)

In (t)	12	10	28	49
Out (a)	25	23	41	62

12)

In (g)	37	12	38	40
Out (r)	44	19	45	47

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



Determine what rule the function machine is using.

1)

Input (p)	Output (y)
54	44
26	16
44	34
56	46
36	26

Subtract 10

2)

Input (n)	Output (b)
52	40
25	13
39	27
60	48
42	30

Subtract 12

3)

Input (m)	Output (i)
19	26
10	17
30	37
24	31
23	30

Add 7

4)

Input (t)	Output (r)
37	26
28	17
43	32
56	45
57	46

Subtract 11

5)

Input (i)	Output (a)
23	29
42	48
47	53
45	51
16	22

Add 6

6)

Input (b)	Output (h)
53	44
40	31
32	23
21	12
55	46

Subtract 9

7)

In (u)	10	46	16	50
Out (i)	23	59	29	63

Add 13

8)

In (w)	39	20	54	35
Out (b)	31	12	46	27

Subtract 8

9)

In (i)	44	25	10	15
Out (y)	57	38	23	28

Add 13

10)

In (v)	45	55	52	60
Out (p)	35	45	42	50

Subtract 10

11)

In (t)	12	10	28	49
Out (a)	25	23	41	62

Add 13

12)

In (g)	37	12	38	40
Out (r)	44	19	45	47

Add 7

Answers

1. **Subtract 10**

2. **Subtract 12**

3. **Add 7**

4. **Subtract 11**

5. **Add 6**

6. **Subtract 9**

7. **Add 13**

8. **Subtract 8**

9. **Add 13**

10. **Subtract 10**

11. **Add 13**

12. **Add 7**



Determine what rule the function machine is using.

Add 6	Subtract 8	Subtract 12	Subtract 11
Add 13	Add 7	Subtract 10	Add 13
Subtract 9			

1)

Input (p)	Output (y)
54	44
26	16
44	34
56	46
36	26

2)

Input (n)	Output (b)
52	40
25	13
39	27
60	48
42	30

3)

Input (m)	Output (i)
19	26
10	17
30	37
24	31
23	30

4)

Input (t)	Output (r)
37	26
28	17
43	32
56	45
57	46

5)

Input (i)	Output (a)
23	29
42	48
47	53
45	51
16	22

6)

Input (b)	Output (h)
53	44
40	31
32	23
21	12
55	46

7)

In (u)	10	46	16	50
Out (i)	23	59	29	63

8)

In (w)	39	20	54	35
Out (b)	31	12	46	27

9)

In (i)	44	25	10	15
Out (y)	57	38	23	28

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_



Determine what rule the function machine is using.

1)

Input (a)	Output (p)
29	14
64	49
40	25
61	46
50	35

2)

Input (n)	Output (t)
26	31
25	30
18	23
49	54
32	37

3)

Input (h)	Output (j)
57	48
37	28
45	36
50	41
46	37

4)

Input (w)	Output (m)
15	24
19	28
45	54
12	21
32	41

5)

Input (b)	Output (d)
12	21
29	38
15	24
18	27
20	29

6)

Input (u)	Output (d)
34	39
48	53
44	49
13	18
37	42

7)

In (e)	43	26	53	40
Out (u)	34	17	44	31

8)

In (d)	24	48	47	46
Out (w)	19	43	42	41

9)

In (v)	21	36	40	17
Out (m)	16	31	35	12

10)

In (u)	13	18	14	27
Out (v)	24	29	25	38

11)

In (m)	11	36	23	22
Out (k)	19	44	31	30

12)

In (a)	49	42	28	40
Out (d)	34	27	13	25

Answers

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



Determine what rule the function machine is using.

1)

Input (a)	Output (p)
29	14
64	49
40	25
61	46
50	35

Subtract 15

2)

Input (n)	Output (t)
26	31
25	30
18	23
49	54
32	37

Add 5

3)

Input (h)	Output (j)
57	48
37	28
45	36
50	41
46	37

Subtract 9

4)

Input (w)	Output (m)
15	24
19	28
45	54
12	21
32	41

Add 9

5)

Input (b)	Output (d)
12	21
29	38
15	24
18	27
20	29

Add 9

6)

Input (u)	Output (d)
34	39
48	53
44	49
13	18
37	42

Add 5

7)

In (e)	43	26	53	40
Out (u)	34	17	44	31

Subtract 9

8)

In (d)	24	48	47	46
Out (w)	19	43	42	41

Subtract 5

9)

In (v)	21	36	40	17
Out (m)	16	31	35	12

Subtract 5

10)

In (u)	13	18	14	27
Out (v)	24	29	25	38

Add 11

11)

In (m)	11	36	23	22
Out (k)	19	44	31	30

Add 8

12)

In (a)	49	42	28	40
Out (d)	34	27	13	25

Subtract 15

Answers

1. **Subtract 15**

2. **Add 5**

3. **Subtract 9**

4. **Add 9**

5. **Add 9**

6. **Add 5**

7. **Subtract 9**

8. **Subtract 5**

9. **Subtract 5**

10. **Add 11**

11. **Add 8**

12. **Subtract 15**



Determine what rule the function machine is using.

Subtract 9	Subtract 15	Add 9	Subtract 9
Subtract 5	Subtract 5	Add 5	Add 5
Add 9			

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

1)

Input (a)	Output (p)
29	14
64	49
40	25
61	46
50	35

2)

Input (n)	Output (t)
26	31
25	30
18	23
49	54
32	37

3)

Input (h)	Output (j)
57	48
37	28
45	36
50	41
46	37

4)

Input (w)	Output (m)
15	24
19	28
45	54
12	21
32	41

5)

Input (b)	Output (d)
12	21
29	38
15	24
18	27
20	29

6)

Input (u)	Output (d)
34	39
48	53
44	49
13	18
37	42

7)

In (e)	43	26	53	40
Out (u)	34	17	44	31

8)

In (d)	24	48	47	46
Out (w)	19	43	42	41

9)

In (v)	21	36	40	17
Out (m)	16	31	35	12



Determine what rule the function machine is using.

1)

Input (t)	Output (i)
51	37
61	47
43	29
50	36
55	41

2)

Input (h)	Output (z)
57	48
36	27
23	14
49	40
35	26

3)

Input (g)	Output (z)
28	39
39	50
38	49
14	25
29	40

4)

Input (p)	Output (g)
31	38
46	53
32	39
13	20
23	30

5)

Input (d)	Output (g)
35	43
43	51
19	27
36	44
28	36

6)

Input (k)	Output (a)
12	21
22	31
49	58
45	54
28	37

7)

In (a)	41	44	28	62
Out (u)	29	32	16	50

8)

In (j)	36	27	13	22
Out (w)	51	42	28	37

9)

In (i)	48	39	58	47
Out (t)	35	26	45	34

10)

In (e)	19	31	50	44
Out (c)	30	42	61	55

11)

In (y)	48	57	62	50
Out (p)	33	42	47	35

12)

In (w)	51	28	55	57
Out (i)	40	17	44	46

Answers

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



Determine what rule the function machine is using.

1)

Input (t)	Output (i)
51	37
61	47
43	29
50	36
55	41

Subtract 14

2)

Input (h)	Output (z)
57	48
36	27
23	14
49	40
35	26

Subtract 9

3)

Input (g)	Output (z)
28	39
39	50
38	49
14	25
29	40

Add 11

4)

Input (p)	Output (g)
31	38
46	53
32	39
13	20
23	30

Add 7

5)

Input (d)	Output (g)
35	43
43	51
19	27
36	44
28	36

Add 8

6)

Input (k)	Output (a)
12	21
22	31
49	58
45	54
28	37

Add 9

7)

In (a)	41	44	28	62
Out (u)	29	32	16	50

Subtract 12

8)

In (j)	36	27	13	22
Out (w)	51	42	28	37

Add 15

9)

In (i)	48	39	58	47
Out (t)	35	26	45	34

Subtract 13

10)

In (e)	19	31	50	44
Out (c)	30	42	61	55

Add 11

11)

In (y)	48	57	62	50
Out (p)	33	42	47	35

Subtract 15

12)

In (w)	51	28	55	57
Out (i)	40	17	44	46

Subtract 11

Answers

1. **Subtract 14**

2. **Subtract 9**

3. **Add 11**

4. **Add 7**

5. **Add 8**

6. **Add 9**

7. **Subtract 12**

8. **Add 15**

9. **Subtract 13**

10. **Add 11**

11. **Subtract 15**

12. **Subtract 11**





Determine what rule the function machine is using.

Add 7	Subtract 9	Add 8	Add 9
Add 15	Add 11	Subtract 13	Subtract 12
Subtract 14			

1)

Input (t)	Output (i)
51	37
61	47
43	29
50	36
55	41

2)

Input (h)	Output (z)
57	48
36	27
23	14
49	40
35	26

3)

Input (g)	Output (z)
28	39
39	50
38	49
14	25
29	40

4)

Input (p)	Output (g)
31	38
46	53
32	39
13	20
23	30

5)

Input (d)	Output (g)
35	43
43	51
19	27
36	44
28	36

6)

Input (k)	Output (a)
12	21
22	31
49	58
45	54
28	37

7)

In (a)	41	44	28	62
Out (u)	29	32	16	50

8)

In (j)	36	27	13	22
Out (w)	51	42	28	37

9)

In (i)	48	39	58	47
Out (t)	35	26	45	34

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_



Determine what rule the function machine is using.

1)

Input (y)	Output (f)
20	11
35	26
47	38
57	48
52	43

2)

Input (u)	Output (n)
22	10
35	23
38	26
29	17
59	47

3)

Input (r)	Output (p)
31	41
21	31
26	36
32	42
11	21

4)

Input (f)	Output (w)
15	28
17	30
27	40
29	42
38	51

5)

Input (f)	Output (m)
16	25
22	31
36	45
40	49
42	51

6)

Input (h)	Output (i)
33	39
18	24
32	38
48	54
36	42

7)

In (e)	33	16	39	10
Out (t)	40	23	46	17

8)

In (e)	20	34	28	19
Out (v)	29	43	37	28

9)

In (v)	54	48	41	40
Out (b)	40	34	27	26

10)

In (b)	37	32	33	25
Out (i)	31	26	27	19

11)

In (b)	42	34	29	48
Out (y)	34	26	21	40

12)

In (z)	51	37	40	23
Out (m)	39	25	28	11

Answers

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



Determine what rule the function machine is using.

1)

Input (y)	Output (f)
20	11
35	26
47	38
57	48
52	43

Subtract 9

2)

Input (u)	Output (n)
22	10
35	23
38	26
29	17
59	47

Subtract 12

3)

Input (r)	Output (p)
31	41
21	31
26	36
32	42
11	21

Add 10

4)

Input (f)	Output (w)
15	28
17	30
27	40
29	42
38	51

Add 13

5)

Input (f)	Output (m)
16	25
22	31
36	45
40	49
42	51

Add 9

6)

Input (h)	Output (i)
33	39
18	24
32	38
48	54
36	42

Add 6

7)

In (e)	33	16	39	10
Out (t)	40	23	46	17

Add 7

8)

In (e)	20	34	28	19
Out (v)	29	43	37	28

Add 9

9)

In (v)	54	48	41	40
Out (b)	40	34	27	26

Subtract 14

10)

In (b)	37	32	33	25
Out (i)	31	26	27	19

Subtract 6

11)

In (b)	42	34	29	48
Out (y)	34	26	21	40

Subtract 8

12)

In (z)	51	37	40	23
Out (m)	39	25	28	11

Subtract 12

Answers

1. Subtract 9

2. Subtract 12

3. Add 10

4. Add 13

5. Add 9

6. Add 6

7. Add 7

8. Add 9

9. Subtract 14

10. Subtract 6

11. Subtract 8

12. Subtract 12



Determine what rule the function machine is using.

- |            |        |             |        |
|------------|--------|-------------|--------|
| Add 7      | Add 6  | Subtract 12 | Add 10 |
| Subtract 9 | Add 13 | Subtract 14 | Add 9  |
| Add 9      |        |             |        |

1)

Input (y)	Output (f)
20	11
35	26
47	38
57	48
52	43

2)

Input (u)	Output (n)
22	10
35	23
38	26
29	17
59	47

3)

Input (r)	Output (p)
31	41
21	31
26	36
32	42
11	21

4)

Input (f)	Output (w)
15	28
17	30
27	40
29	42
38	51

5)

Input (f)	Output (m)
16	25
22	31
36	45
40	49
42	51

6)

Input (h)	Output (i)
33	39
18	24
32	38
48	54
36	42

7)

In (e)	33	16	39	10
Out (t)	40	23	46	17

8)

In (e)	20	34	28	19
Out (v)	29	43	37	28

9)

In (v)	54	48	41	40
Out (b)	40	34	27	26

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_



Determine what rule the function machine is using.

1)

Input (a)	Output (j)
24	36
46	58
50	62
44	56
15	27

2)

Input (d)	Output (m)
57	44
43	30
61	48
30	17
32	19

3)

Input (t)	Output (e)
32	41
44	53
42	51
14	23
23	32

4)

Input (b)	Output (h)
13	22
24	33
17	26
34	43
18	27

5)

Input (h)	Output (a)
42	30
40	28
59	47
55	43
41	29

6)

Input (a)	Output (c)
39	26
41	28
57	44
37	24
29	16

7)

In (n)	27	50	40	30
Out (a)	17	40	30	20

8)

In (e)	16	44	10	38
Out (u)	31	59	25	53

9)

In (r)	34	37	41	48
Out (c)	40	43	47	54

10)

In (t)	44	46	39	35
Out (n)	38	40	33	29

11)

In (c)	40	38	21	49
Out (g)	54	52	35	63

12)

In (u)	45	26	36	23
Out (i)	58	39	49	36

Answers

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



Determine what rule the function machine is using.

1)

Input (a)	Output (j)
24	36
46	58
50	62
44	56
15	27

Add 12

2)

Input (d)	Output (m)
57	44
43	30
61	48
30	17
32	19

Subtract 13

3)

Input (t)	Output (e)
32	41
44	53
42	51
14	23
23	32

Add 9

4)

Input (b)	Output (h)
13	22
24	33
17	26
34	43
18	27

Add 9

5)

Input (h)	Output (a)
42	30
40	28
59	47
55	43
41	29

Subtract 12

6)

Input (a)	Output (c)
39	26
41	28
57	44
37	24
29	16

Subtract 13

7)

In (n)	27	50	40	30
Out (a)	17	40	30	20

Subtract 10

8)

In (e)	16	44	10	38
Out (u)	31	59	25	53

Add 15

9)

In (r)	34	37	41	48
Out (c)	40	43	47	54

Add 6

10)

In (t)	44	46	39	35
Out (n)	38	40	33	29

Subtract 6

11)

In (c)	40	38	21	49
Out (g)	54	52	35	63

Add 14

12)

In (u)	45	26	36	23
Out (i)	58	39	49	36

Add 13

Answers

1. Add 12

2. Subtract 13

3. Add 9

4. Add 9

5. Subtract 12

6. Subtract 13

7. Subtract 10

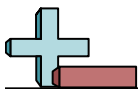
8. Add 15

9. Add 6

10. Subtract 6

11. Add 14

12. Add 13



Determine what rule the function machine is using.

Subtract 13  
Subtract 13  
Add 9

Add 12  
Subtract 12

Add 15  
Add 9

Add 6  
Subtract 10

1)

Input (a)	Output (j)
24	36
46	58
50	62
44	56
15	27

2)

Input (d)	Output (m)
57	44
43	30
61	48
30	17
32	19

3)

Input (t)	Output (e)
32	41
44	53
42	51
14	23
23	32

4)

Input (b)	Output (h)
13	22
24	33
17	26
34	43
18	27

5)

Input (h)	Output (a)
42	30
40	28
59	47
55	43
41	29

6)

Input (a)	Output (c)
39	26
41	28
57	44
37	24
29	16

7)

In (n)	27	50	40	30
Out (a)	17	40	30	20

8)

In (e)	16	44	10	38
Out (u)	31	59	25	53

9)

In (r)	34	37	41	48
Out (c)	40	43	47	54

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_



Determine what rule the function machine is using.

1)

Input (z)	Output (b)
37	44
28	35
13	20
23	30
27	34

2)

Input (b)	Output (g)
10	24
41	55
45	59
12	26
16	30

3)

Input (e)	Output (d)
32	25
40	33
23	16
50	43
18	11

4)

Input (d)	Output (p)
27	36
19	28
33	42
38	47
48	57

5)

Input (d)	Output (f)
17	12
19	14
25	20
20	15
31	26

6)

Input (j)	Output (h)
23	34
11	22
27	38
35	46
15	26

7)

In (f)	45	35	16	30
Out (v)	58	48	29	43

8)

In (b)	18	41	52	45
Out (v)	10	33	44	37

9)

In (t)	46	34	32	57
Out (a)	33	21	19	44

10)

In (h)	60	24	38	57
Out (u)	50	14	28	47

11)

In (b)	12	13	10	15
Out (v)	27	28	25	30

12)

In (b)	18	22	40	35
Out (i)	13	17	35	30

Answers

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





Determine what rule the function machine is using.

1)

Input (z)	Output (b)
37	44
28	35
13	20
23	30
27	34

Add 7

2)

Input (b)	Output (g)
10	24
41	55
45	59
12	26
16	30

Add 14

3)

Input (e)	Output (d)
32	25
40	33
23	16
50	43
18	11

Subtract 7

4)

Input (d)	Output (p)
27	36
19	28
33	42
38	47
48	57

Add 9

5)

Input (d)	Output (f)
17	12
19	14
25	20
20	15
31	26

Subtract 5

6)

Input (j)	Output (h)
23	34
11	22
27	38
35	46
15	26

Add 11

7)

In (f)	45	35	16	30
Out (v)	58	48	29	43

Add 13

8)

In (b)	18	41	52	45
Out (v)	10	33	44	37

Subtract 8

9)

In (t)	46	34	32	57
Out (a)	33	21	19	44

Subtract 13

10)

In (h)	60	24	38	57
Out (u)	50	14	28	47

Subtract 10

11)

In (b)	12	13	10	15
Out (v)	27	28	25	30

Add 15

12)

In (b)	18	22	40	35
Out (i)	13	17	35	30

Subtract 5

Answers

1. Add 7

2. Add 14

3. Subtract 7

4. Add 9

5. Subtract 5

6. Add 11

7. Add 13

8. Subtract 8

9. Subtract 13

10. Subtract 10

11. Add 15

12. Subtract 5



Determine what rule the function machine is using.

Add 9	Subtract 7	Add 13	Add 7
Add 11	Add 14	Subtract 8	Subtract 13
Subtract 5			

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

1)

Input (z)	Output (b)
37	44
28	35
13	20
23	30
27	34

2)

Input (b)	Output (g)
10	24
41	55
45	59
12	26
16	30

3)

Input (e)	Output (d)
32	25
40	33
23	16
50	43
18	11

4)

Input (d)	Output (p)
27	36
19	28
33	42
38	47
48	57

5)

Input (d)	Output (f)
17	12
19	14
25	20
20	15
31	26

6)

Input (j)	Output (h)
23	34
11	22
27	38
35	46
15	26

7)

In (f)	45	35	16	30
Out (v)	58	48	29	43

8)

In (b)	18	41	52	45
Out (v)	10	33	44	37

9)

In (t)	46	34	32	57
Out (a)	33	21	19	44



Determine what rule the function machine is using.

1)

Input (v)	Output (z)
43	28
63	48
38	23
59	44
42	27

2)

Input (k)	Output (r)
26	19
29	22
35	28
38	31
32	25

3)

Input (w)	Output (e)
36	49
21	34
41	54
38	51
24	37

4)

Input (e)	Output (z)
43	30
51	38
37	24
33	20
47	34

5)

Input (t)	Output (w)
10	24
40	54
14	28
25	39
35	49

6)

Input (w)	Output (d)
55	46
24	15
33	24
52	43
26	17

7)

In (d)	19	15	16	12
Out (u)	32	28	29	25

8)

In (a)	11	46	41	24
Out (d)	19	54	49	32

9)

In (r)	45	53	35	46
Out (f)	36	44	26	37

10)

In (v)	49	43	33	32
Out (r)	54	48	38	37

11)

In (z)	10	46	22	11
Out (n)	16	52	28	17

12)

In (z)	20	42	40	18
Out (g)	12	34	32	10

Answers

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



Determine what rule the function machine is using.

1)

Input (v)	Output (z)
43	28
63	48
38	23
59	44
42	27

Subtract 15

2)

Input (k)	Output (r)
26	19
29	22
35	28
38	31
32	25

Subtract 7

3)

Input (w)	Output (e)
36	49
21	34
41	54
38	51
24	37

Add 13

4)

Input (e)	Output (z)
43	30
51	38
37	24
33	20
47	34

Subtract 13

5)

Input (t)	Output (w)
10	24
40	54
14	28
25	39
35	49

Add 14

6)

Input (w)	Output (d)
55	46
24	15
33	24
52	43
26	17

Subtract 9

7)

In (d)	19	15	16	12
Out (u)	32	28	29	25

Add 13

8)

In (a)	11	46	41	24
Out (d)	19	54	49	32

Add 8

9)

In (r)	45	53	35	46
Out (f)	36	44	26	37

Subtract 9

10)

In (v)	49	43	33	32
Out (r)	54	48	38	37

Add 5

11)

In (z)	10	46	22	11
Out (n)	16	52	28	17

Add 6

12)

In (z)	20	42	40	18
Out (g)	12	34	32	10

Subtract 8

Answers

1. **Subtract 15**

2. **Subtract 7**

3. **Add 13**

4. **Subtract 13**

5. **Add 14**

6. **Subtract 9**

7. **Add 13**

8. **Add 8**

9. **Subtract 9**

10. **Add 5**

11. **Add 6**

12. **Subtract 8**



Determine what rule the function machine is using.

Subtract 9	Add 8	Subtract 7	Subtract 15
Subtract 13	Add 13	Add 14	Subtract 9
Add 13			

1)

Input (v)	Output (z)
43	28
63	48
38	23
59	44
42	27

2)

Input (k)	Output (r)
26	19
29	22
35	28
38	31
32	25

3)

Input (w)	Output (e)
36	49
21	34
41	54
38	51
24	37

4)

Input (e)	Output (z)
43	30
51	38
37	24
33	20
47	34

5)

Input (t)	Output (w)
10	24
40	54
14	28
25	39
35	49

6)

Input (w)	Output (d)
55	46
24	15
33	24
52	43
26	17

7)

In (d)	19	15	16	12
Out (u)	32	28	29	25

8)

In (a)	11	46	41	24
Out (d)	19	54	49	32

9)

In (r)	45	53	35	46
Out (f)	36	44	26	37

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_



Determine what rule the function machine is using.

1)

Input (n)	Output (j)
19	11
36	28
37	29
27	19
58	50

2)

Input (n)	Output (p)
31	17
41	27
49	35
63	49
45	31

3)

Input (n)	Output (i)
29	39
50	60
10	20
34	44
23	33

4)

Input (m)	Output (f)
22	28
23	29
38	44
47	53
41	47

5)

Input (w)	Output (k)
48	61
21	34
29	42
28	41
47	60

6)

Input (b)	Output (w)
36	23
62	49
47	34
58	45
50	37

7)

In (c)	27	54	39	23
Out (e)	17	44	29	13

8)

In (b)	25	57	52	63
Out (i)	10	42	37	48

9)

In (d)	15	18	22	42
Out (m)	24	27	31	51

10)

In (r)	10	49	41	28
Out (f)	21	60	52	39

11)

In (w)	44	14	15	45
Out (z)	57	27	28	58

12)

In (i)	46	23	55	36
Out (h)	37	14	46	27

Answers

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



Determine what rule the function machine is using.

1)

Input (n)	Output (j)
19	11
36	28
37	29
27	19
58	50

Subtract 8

2)

Input (n)	Output (p)
31	17
41	27
49	35
63	49
45	31

Subtract 14

3)

Input (n)	Output (i)
29	39
50	60
10	20
34	44
23	33

Add 10

4)

Input (m)	Output (f)
22	28
23	29
38	44
47	53
41	47

Add 6

5)

Input (w)	Output (k)
48	61
21	34
29	42
28	41
47	60

Add 13

6)

Input (b)	Output (w)
36	23
62	49
47	34
58	45
50	37

Subtract 13

7)

In (c)	27	54	39	23
Out (e)	17	44	29	13

Subtract 10

8)

In (b)	25	57	52	63
Out (i)	10	42	37	48

Subtract 15

9)

In (d)	15	18	22	42
Out (m)	24	27	31	51

Add 9

10)

In (r)	10	49	41	28
Out (f)	21	60	52	39

Add 11

11)

In (w)	44	14	15	45
Out (z)	57	27	28	58

Add 13

12)

In (i)	46	23	55	36
Out (h)	37	14	46	27

Subtract 9

Answers

1. Subtract 8

2. Subtract 14

3. Add 10

4. Add 6

5. Add 13

6. Subtract 13

7. Subtract 10

8. Subtract 15

9. Add 9

10. Add 11

11. Add 13

12. Subtract 9



Determine what rule the function machine is using.

- |             |        |             |             |
|-------------|--------|-------------|-------------|
| Add 6       | Add 10 | Subtract 10 | Subtract 8  |
| Add 13      | Add 9  | Subtract 14 | Subtract 15 |
| Subtract 13 |        |             |             |

1)

Input (n)	Output (j)
19	11
36	28
37	29
27	19
58	50

2)

Input (n)	Output (p)
31	17
41	27
49	35
63	49
45	31

3)

Input (n)	Output (i)
29	39
50	60
10	20
34	44
23	33

4)

Input (m)	Output (f)
22	28
23	29
38	44
47	53
41	47

5)

Input (w)	Output (k)
48	61
21	34
29	42
28	41
47	60

6)

Input (b)	Output (w)
36	23
62	49
47	34
58	45
50	37

7)

In (c)	27	54	39	23
Out (e)	17	44	29	13

8)

In (b)	25	57	52	63
Out (i)	10	42	37	48

9)

In (d)	15	18	22	42
Out (m)	24	27	31	51

Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_





Determine what rule the function machine is using.

1)

Input (g)	Output (i)
28	41
20	33
32	45
18	31
30	43

2)

Input (d)	Output (m)
62	49
23	10
51	38
49	36
26	13

3)

Input (p)	Output (e)
36	28
28	20
25	17
54	46
53	45

4)

Input (v)	Output (j)
23	35
11	23
37	49
34	46
29	41

5)

Input (v)	Output (t)
25	17
43	35
33	25
38	30
49	41

6)

Input (u)	Output (e)
58	49
20	11
21	12
32	23
56	47

7)

In (t)	39	20	34	33
Out (k)	48	29	43	42

8)

In (i)	34	32	16	22
Out (t)	47	45	29	35

9)

In (e)	43	25	16	38
Out (r)	49	31	22	44

10)

In (m)	34	33	24	55
Out (w)	24	23	14	45

11)

In (n)	31	35	45	25
Out (k)	44	48	58	38

12)

In (e)	36	39	51	60
Out (v)	22	25	37	46

Answers

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



Determine what rule the function machine is using.

1)

Input (g)	Output (i)
28	41
20	33
32	45
18	31
30	43

Add 13

2)

Input (d)	Output (m)
62	49
23	10
51	38
49	36
26	13

Subtract 13

3)

Input (p)	Output (e)
36	28
28	20
25	17
54	46
53	45

Subtract 8

4)

Input (v)	Output (j)
23	35
11	23
37	49
34	46
29	41

Add 12

5)

Input (v)	Output (t)
25	17
43	35
33	25
38	30
49	41

Subtract 8

6)

Input (u)	Output (e)
58	49
20	11
21	12
32	23
56	47

Subtract 9

7)

In (t)	39	20	34	33
Out (k)	48	29	43	42

Add 9

8)

In (i)	34	32	16	22
Out (t)	47	45	29	35

Add 13

9)

In (e)	43	25	16	38
Out (r)	49	31	22	44

Add 6

10)

In (m)	34	33	24	55
Out (w)	24	23	14	45

Subtract 10

11)

In (n)	31	35	45	25
Out (k)	44	48	58	38

Add 13

12)

In (e)	36	39	51	60
Out (v)	22	25	37	46

Subtract 14

Answers

1. Add 13

2. Subtract 13

3. Subtract 8

4. Add 12

5. Subtract 8

6. Subtract 9

7. Add 9

8. Add 13

9. Add 6

10. Subtract 10

11. Add 13

12. Subtract 14



Determine what rule the function machine is using.

Add 6	Add 9	Subtract 8	Subtract 13
Add 13	Add 12	Subtract 9	Add 13
Subtract 8			

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

1)

Input (g)	Output (i)
28	41
20	33
32	45
18	31
30	43

2)

Input (d)	Output (m)
62	49
23	10
51	38
49	36
26	13

3)

Input (p)	Output (e)
36	28
28	20
25	17
54	46
53	45

4)

Input (v)	Output (j)
23	35
11	23
37	49
34	46
29	41

5)

Input (v)	Output (t)
25	17
43	35
33	25
38	30
49	41

6)

Input (u)	Output (e)
58	49
20	11
21	12
32	23
56	47

7)

In (t)	39	20	34	33
Out (k)	48	29	43	42

8)

In (i)	34	32	16	22
Out (t)	47	45	29	35

9)

In (e)	43	25	16	38
Out (r)	49	31	22	44



Determine what rule the function machine is using.

Answers

1)

Input (a)	Output (k)
34	40
23	29
42	48
24	30
32	38

2)

Input (v)	Output (n)
40	55
48	63
18	33
43	58
41	56

3)

Input (j)	Output (a)
43	34
37	28
55	46
54	45
29	20

4)

Input (c)	Output (z)
35	20
47	32
65	50
63	48
29	14

5)

Input (f)	Output (r)
35	45
42	52
40	50
26	36
19	29

6)

Input (t)	Output (h)
61	50
45	34
35	24
38	27
33	22

7)

In (u)	37	27	36	14
Out (w)	50	40	49	27

8)

In (j)	39	40	24	45
Out (u)	28	29	13	34

9)

In (y)	20	24	37	26
Out (t)	28	32	45	34

10)

In (r)	38	46	28	39
Out (y)	33	41	23	34

11)

In (z)	17	15	55	35
Out (w)	12	10	50	30

12)

In (y)	30	46	12	26
Out (z)	41	57	23	37

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



Determine what rule the function machine is using.

1)

Input (a)	Output (k)
34	40
23	29
42	48
24	30
32	38

Add 6

2)

Input (v)	Output (n)
40	55
48	63
18	33
43	58
41	56

Add 15

3)

Input (j)	Output (a)
43	34
37	28
55	46
54	45
29	20

Subtract 9

4)

Input (c)	Output (z)
35	20
47	32
65	50
63	48
29	14

Subtract 15

5)

Input (f)	Output (r)
35	45
42	52
40	50
26	36
19	29

Add 10

6)

Input (t)	Output (h)
61	50
45	34
35	24
38	27
33	22

Subtract 11

7)

In (u)	37	27	36	14
Out (w)	50	40	49	27

Add 13

8)

In (j)	39	40	24	45
Out (u)	28	29	13	34

Subtract 11

9)

In (y)	20	24	37	26
Out (t)	28	32	45	34

Add 8

10)

In (r)	38	46	28	39
Out (y)	33	41	23	34

Subtract 5

11)

In (z)	17	15	55	35
Out (w)	12	10	50	30

Subtract 5

12)

In (y)	30	46	12	26
Out (z)	41	57	23	37

Add 11

Answers

1. Add 6

2. Add 15

3. Subtract 9

4. Subtract 15

5. Add 10

6. Subtract 11

7. Add 13

8. Subtract 11

9. Add 8

10. Subtract 5

11. Subtract 5

12. Add 11



Determine what rule the function machine is using.

Subtract 15	Add 8	Subtract 11	Add 13
Add 15	Add 6	Subtract 11	Add 10
Subtract 9			

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

1)

Input (a)	Output (k)
34	40
23	29
42	48
24	30
32	38

2)

Input (v)	Output (n)
40	55
48	63
18	33
43	58
41	56

3)

Input (j)	Output (a)
43	34
37	28
55	46
54	45
29	20

4)

Input (c)	Output (z)
35	20
47	32
65	50
63	48
29	14

5)

Input (f)	Output (r)
35	45
42	52
40	50
26	36
19	29

6)

Input (t)	Output (h)
61	50
45	34
35	24
38	27
33	22

7)

In (u)	37	27	36	14
Out (w)	50	40	49	27

8)

In (j)	39	40	24	45
Out (u)	28	29	13	34

9)

In (y)	20	24	37	26
Out (t)	28	32	45	34