



Determine what rule the function machine is using.

1)

| Input (p) | Output (c) |
|-----------|------------|
| 44        | 38         |
| 22        | 16         |
| 52        | 46         |
| 49        | 43         |
| 55        | 49         |

2)

| Input (j) | Output (i) |
|-----------|------------|
| 51        | 40         |
| 23        | 12         |
| 52        | 41         |
| 37        | 26         |
| 21        | 10         |

3)

| Input (c) | Output (d) |
|-----------|------------|
| 32        | 45         |
| 43        | 56         |
| 40        | 53         |
| 13        | 26         |
| 36        | 49         |

4)

| Input (n) | Output (s) |
|-----------|------------|
| 53        | 45         |
| 23        | 15         |
| 28        | 20         |
| 46        | 38         |
| 43        | 35         |

5)

| Input (i) | Output (g) |
|-----------|------------|
| 49        | 61         |
| 25        | 37         |
| 22        | 34         |
| 28        | 40         |
| 30        | 42         |

6)

| Input (a) | Output (h) |
|-----------|------------|
| 23        | 12         |
| 37        | 26         |
| 31        | 20         |
| 60        | 49         |
| 40        | 29         |

7)

| In (t)  | 50 | 48 | 23 | 22 |
|---------|----|----|----|----|
| Out (n) | 61 | 59 | 34 | 33 |

8)

| In (q)  | 24 | 50 | 36 | 55 |
|---------|----|----|----|----|
| Out (n) | 19 | 45 | 31 | 50 |

9)

| In (w)  | 12 | 20 | 50 | 40 |
|---------|----|----|----|----|
| Out (i) | 27 | 35 | 65 | 55 |

10)

| In (j)  | 29 | 27 | 38 | 46 |
|---------|----|----|----|----|
| Out (y) | 24 | 22 | 33 | 41 |

11)

| In (m)  | 12 | 22 | 48 | 38 |
|---------|----|----|----|----|
| Out (z) | 27 | 37 | 63 | 53 |

12)

| In (t)  | 38 | 30 | 24 | 11 |
|---------|----|----|----|----|
| Out (q) | 51 | 43 | 37 | 24 |

Answers

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



Determine what rule the function machine is using.

1)

| Input (p) | Output (c) |
|-----------|------------|
| 44        | 38         |
| 22        | 16         |
| 52        | 46         |
| 49        | 43         |
| 55        | 49         |

Subtract 6

2)

| Input (j) | Output (i) |
|-----------|------------|
| 51        | 40         |
| 23        | 12         |
| 52        | 41         |
| 37        | 26         |
| 21        | 10         |

Subtract 11

3)

| Input (c) | Output (d) |
|-----------|------------|
| 32        | 45         |
| 43        | 56         |
| 40        | 53         |
| 13        | 26         |
| 36        | 49         |

Add 13

4)

| Input (n) | Output (s) |
|-----------|------------|
| 53        | 45         |
| 23        | 15         |
| 28        | 20         |
| 46        | 38         |
| 43        | 35         |

Subtract 8

5)

| Input (i) | Output (g) |
|-----------|------------|
| 49        | 61         |
| 25        | 37         |
| 22        | 34         |
| 28        | 40         |
| 30        | 42         |

Add 12

6)

| Input (a) | Output (h) |
|-----------|------------|
| 23        | 12         |
| 37        | 26         |
| 31        | 20         |
| 60        | 49         |
| 40        | 29         |

Subtract 11

7)

| In (t)  | 50 | 48 | 23 | 22 |
|---------|----|----|----|----|
| Out (n) | 61 | 59 | 34 | 33 |

Add 11

8)

| In (q)  | 24 | 50 | 36 | 55 |
|---------|----|----|----|----|
| Out (n) | 19 | 45 | 31 | 50 |

Subtract 5

9)

| In (w)  | 12 | 20 | 50 | 40 |
|---------|----|----|----|----|
| Out (i) | 27 | 35 | 65 | 55 |

Add 15

10)

| In (j)  | 29 | 27 | 38 | 46 |
|---------|----|----|----|----|
| Out (y) | 24 | 22 | 33 | 41 |

Subtract 5

11)

| In (m)  | 12 | 22 | 48 | 38 |
|---------|----|----|----|----|
| Out (z) | 27 | 37 | 63 | 53 |

Add 15

12)

| In (t)  | 38 | 30 | 24 | 11 |
|---------|----|----|----|----|
| Out (q) | 51 | 43 | 37 | 24 |

Add 13

Answers

1. Subtract 6

2. Subtract 11

3. Add 13

4. Subtract 8

5. Add 12

6. Subtract 11

7. Add 11

8. Subtract 5

9. Add 15

10. Subtract 5

11. Add 15

12. Add 13



Determine what rule the function machine is using.

Answers

|             |             |            |            |
|-------------|-------------|------------|------------|
| Add 15      | Subtract 6  | Subtract 8 | Add 11     |
| Subtract 11 | Subtract 11 | Add 12     | Subtract 5 |
| Add 13      |             |            |            |

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

1)

| Input (p) | Output (c) |
|-----------|------------|
| 44        | 38         |
| 22        | 16         |
| 52        | 46         |
| 49        | 43         |
| 55        | 49         |

2)

| Input (j) | Output (i) |
|-----------|------------|
| 51        | 40         |
| 23        | 12         |
| 52        | 41         |
| 37        | 26         |
| 21        | 10         |

3)

| Input (c) | Output (d) |
|-----------|------------|
| 32        | 45         |
| 43        | 56         |
| 40        | 53         |
| 13        | 26         |
| 36        | 49         |

4)

| Input (n) | Output (s) |
|-----------|------------|
| 53        | 45         |
| 23        | 15         |
| 28        | 20         |
| 46        | 38         |
| 43        | 35         |

5)

| Input (i) | Output (g) |
|-----------|------------|
| 49        | 61         |
| 25        | 37         |
| 22        | 34         |
| 28        | 40         |
| 30        | 42         |

6)

| Input (a) | Output (h) |
|-----------|------------|
| 23        | 12         |
| 37        | 26         |
| 31        | 20         |
| 60        | 49         |
| 40        | 29         |

7)

| In (t)  | 50 | 48 | 23 | 22 |
|---------|----|----|----|----|
| Out (n) | 61 | 59 | 34 | 33 |

8)

| In (q)  | 24 | 50 | 36 | 55 |
|---------|----|----|----|----|
| Out (n) | 19 | 45 | 31 | 50 |

9)

| In (w)  | 12 | 20 | 50 | 40 |
|---------|----|----|----|----|
| Out (i) | 27 | 35 | 65 | 55 |



Determine what rule the function machine is using.

1)

| Input (p) | Output (g) |
|-----------|------------|
| 33        | 27         |
| 40        | 34         |
| 36        | 30         |
| 24        | 18         |
| 25        | 19         |

2)

| Input (b) | Output (a) |
|-----------|------------|
| 50        | 61         |
| 28        | 39         |
| 18        | 29         |
| 35        | 46         |
| 41        | 52         |

3)

| Input (l) | Output (w) |
|-----------|------------|
| 49        | 34         |
| 33        | 18         |
| 40        | 25         |
| 59        | 44         |
| 36        | 21         |

4)

| Input (o) | Output (d) |
|-----------|------------|
| 44        | 56         |
| 35        | 47         |
| 21        | 33         |
| 34        | 46         |
| 28        | 40         |

5)

| Input (d) | Output (q) |
|-----------|------------|
| 17        | 30         |
| 30        | 43         |
| 32        | 45         |
| 40        | 53         |
| 38        | 51         |

6)

| Input (q) | Output (a) |
|-----------|------------|
| 23        | 34         |
| 18        | 29         |
| 11        | 22         |
| 29        | 40         |
| 32        | 43         |

7)

| In (z)  | 51 | 60 | 40 | 39 |
|---------|----|----|----|----|
| Out (t) | 37 | 46 | 26 | 25 |

8)

| In (y)  | 44 | 40 | 52 | 33 |
|---------|----|----|----|----|
| Out (c) | 37 | 33 | 45 | 26 |

9)

| In (j)  | 41 | 36 | 26 | 53 |
|---------|----|----|----|----|
| Out (e) | 36 | 31 | 21 | 48 |

10)

| In (i)  | 29 | 19 | 43 | 22 |
|---------|----|----|----|----|
| Out (k) | 44 | 34 | 58 | 37 |

11)

| In (u)  | 46 | 15 | 49 | 34 |
|---------|----|----|----|----|
| Out (b) | 61 | 30 | 64 | 49 |

12)

| In (p)  | 44 | 42 | 21 | 45 |
|---------|----|----|----|----|
| Out (q) | 38 | 36 | 15 | 39 |

Answers

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



Determine what rule the function machine is using.

1)

| Input (p) | Output (g) |
|-----------|------------|
| 33        | 27         |
| 40        | 34         |
| 36        | 30         |
| 24        | 18         |
| 25        | 19         |

Subtract 6

2)

| Input (b) | Output (a) |
|-----------|------------|
| 50        | 61         |
| 28        | 39         |
| 18        | 29         |
| 35        | 46         |
| 41        | 52         |

Add 11

3)

| Input (l) | Output (w) |
|-----------|------------|
| 49        | 34         |
| 33        | 18         |
| 40        | 25         |
| 59        | 44         |
| 36        | 21         |

Subtract 15

4)

| Input (o) | Output (d) |
|-----------|------------|
| 44        | 56         |
| 35        | 47         |
| 21        | 33         |
| 34        | 46         |
| 28        | 40         |

Add 12

5)

| Input (d) | Output (q) |
|-----------|------------|
| 17        | 30         |
| 30        | 43         |
| 32        | 45         |
| 40        | 53         |
| 38        | 51         |

Add 13

6)

| Input (q) | Output (a) |
|-----------|------------|
| 23        | 34         |
| 18        | 29         |
| 11        | 22         |
| 29        | 40         |
| 32        | 43         |

Add 11

7)

| In (z)  | 51 | 60 | 40 | 39 |
|---------|----|----|----|----|
| Out (t) | 37 | 46 | 26 | 25 |

Subtract 14

8)

| In (y)  | 44 | 40 | 52 | 33 |
|---------|----|----|----|----|
| Out (c) | 37 | 33 | 45 | 26 |

Subtract 7

9)

| In (j)  | 41 | 36 | 26 | 53 |
|---------|----|----|----|----|
| Out (e) | 36 | 31 | 21 | 48 |

Subtract 5

10)

| In (i)  | 29 | 19 | 43 | 22 |
|---------|----|----|----|----|
| Out (k) | 44 | 34 | 58 | 37 |

Add 15

11)

| In (u)  | 46 | 15 | 49 | 34 |
|---------|----|----|----|----|
| Out (b) | 61 | 30 | 64 | 49 |

Add 15

12)

| In (p)  | 44 | 42 | 21 | 45 |
|---------|----|----|----|----|
| Out (q) | 38 | 36 | 15 | 39 |

Subtract 6

Answers

1. **Subtract 6**

2. **Add 11**

3. **Subtract 15**

4. **Add 12**

5. **Add 13**

6. **Add 11**

7. **Subtract 14**

8. **Subtract 7**

9. **Subtract 5**

10. **Add 15**

11. **Add 15**

12. **Subtract 6**



Determine what rule the function machine is using.

Answers

- |            |            |             |        |
|------------|------------|-------------|--------|
| Subtract 5 | Add 12     | Subtract 15 | Add 11 |
| Subtract 7 | Subtract 6 | Subtract 14 | Add 11 |
| Add 13     |            |             |        |

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

1)

| Input (p) | Output (g) |
|-----------|------------|
| 33        | 27         |
| 40        | 34         |
| 36        | 30         |
| 24        | 18         |
| 25        | 19         |

2)

| Input (b) | Output (a) |
|-----------|------------|
| 50        | 61         |
| 28        | 39         |
| 18        | 29         |
| 35        | 46         |
| 41        | 52         |

3)

| Input (l) | Output (w) |
|-----------|------------|
| 49        | 34         |
| 33        | 18         |
| 40        | 25         |
| 59        | 44         |
| 36        | 21         |

4)

| Input (o) | Output (d) |
|-----------|------------|
| 44        | 56         |
| 35        | 47         |
| 21        | 33         |
| 34        | 46         |
| 28        | 40         |

5)

| Input (d) | Output (q) |
|-----------|------------|
| 17        | 30         |
| 30        | 43         |
| 32        | 45         |
| 40        | 53         |
| 38        | 51         |

6)

| Input (q) | Output (a) |
|-----------|------------|
| 23        | 34         |
| 18        | 29         |
| 11        | 22         |
| 29        | 40         |
| 32        | 43         |

7)

| In (z)  | 51 | 60 | 40 | 39 |
|---------|----|----|----|----|
| Out (t) | 37 | 46 | 26 | 25 |

8)

| In (y)  | 44 | 40 | 52 | 33 |
|---------|----|----|----|----|
| Out (c) | 37 | 33 | 45 | 26 |

9)

| In (j)  | 41 | 36 | 26 | 53 |
|---------|----|----|----|----|
| Out (e) | 36 | 31 | 21 | 48 |



Determine what rule the function machine is using.

1)

| Input (o) | Output (j) |
|-----------|------------|
| 36        | 30         |
| 37        | 31         |
| 53        | 47         |
| 18        | 12         |
| 39        | 33         |

2)

| Input (m) | Output (h) |
|-----------|------------|
| 35        | 24         |
| 47        | 36         |
| 61        | 50         |
| 45        | 34         |
| 29        | 18         |

3)

| Input (g) | Output (f) |
|-----------|------------|
| 33        | 46         |
| 31        | 44         |
| 20        | 33         |
| 18        | 31         |
| 21        | 34         |

4)

| Input (j) | Output (t) |
|-----------|------------|
| 15        | 21         |
| 35        | 41         |
| 34        | 40         |
| 38        | 44         |
| 37        | 43         |

5)

| Input (h) | Output (l) |
|-----------|------------|
| 27        | 36         |
| 32        | 41         |
| 45        | 54         |
| 40        | 49         |
| 49        | 58         |

6)

| Input (z) | Output (j) |
|-----------|------------|
| 10        | 25         |
| 43        | 58         |
| 20        | 35         |
| 28        | 43         |
| 18        | 33         |

7)

| In (s)  | 61 | 60 | 34 | 25 |
|---------|----|----|----|----|
| Out (q) | 47 | 46 | 20 | 11 |

8)

| In (g)  | 16 | 12 | 21 | 41 |
|---------|----|----|----|----|
| Out (w) | 23 | 19 | 28 | 48 |

9)

| In (e)  | 46 | 39 | 33 | 25 |
|---------|----|----|----|----|
| Out (g) | 41 | 34 | 28 | 20 |

10)

| In (a)  | 30 | 28 | 11 | 41 |
|---------|----|----|----|----|
| Out (e) | 39 | 37 | 20 | 50 |

11)

| In (j)  | 47 | 60 | 45 | 46 |
|---------|----|----|----|----|
| Out (w) | 36 | 49 | 34 | 35 |

12)

| In (k)  | 27 | 26 | 42 | 52 |
|---------|----|----|----|----|
| Out (g) | 22 | 21 | 37 | 47 |

Answers

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



Determine what rule the function machine is using.

1)

| Input (o) | Output (j) |
|-----------|------------|
| 36        | 30         |
| 37        | 31         |
| 53        | 47         |
| 18        | 12         |
| 39        | 33         |

Subtract 6

2)

| Input (m) | Output (h) |
|-----------|------------|
| 35        | 24         |
| 47        | 36         |
| 61        | 50         |
| 45        | 34         |
| 29        | 18         |

Subtract 11

3)

| Input (g) | Output (f) |
|-----------|------------|
| 33        | 46         |
| 31        | 44         |
| 20        | 33         |
| 18        | 31         |
| 21        | 34         |

Add 13

4)

| Input (j) | Output (t) |
|-----------|------------|
| 15        | 21         |
| 35        | 41         |
| 34        | 40         |
| 38        | 44         |
| 37        | 43         |

Add 6

5)

| Input (h) | Output (l) |
|-----------|------------|
| 27        | 36         |
| 32        | 41         |
| 45        | 54         |
| 40        | 49         |
| 49        | 58         |

Add 9

6)

| Input (z) | Output (j) |
|-----------|------------|
| 10        | 25         |
| 43        | 58         |
| 20        | 35         |
| 28        | 43         |
| 18        | 33         |

Add 15

7)

| In (s)  | 61 | 60 | 34 | 25 |
|---------|----|----|----|----|
| Out (q) | 47 | 46 | 20 | 11 |

Subtract 14

8)

| In (g)  | 16 | 12 | 21 | 41 |
|---------|----|----|----|----|
| Out (w) | 23 | 19 | 28 | 48 |

Add 7

9)

| In (e)  | 46 | 39 | 33 | 25 |
|---------|----|----|----|----|
| Out (g) | 41 | 34 | 28 | 20 |

Subtract 5

10)

| In (a)  | 30 | 28 | 11 | 41 |
|---------|----|----|----|----|
| Out (e) | 39 | 37 | 20 | 50 |

Add 9

11)

| In (j)  | 47 | 60 | 45 | 46 |
|---------|----|----|----|----|
| Out (w) | 36 | 49 | 34 | 35 |

Subtract 11

12)

| In (k)  | 27 | 26 | 42 | 52 |
|---------|----|----|----|----|
| Out (g) | 22 | 21 | 37 | 47 |

Subtract 5

Answers

1. Subtract 6

2. Subtract 11

3. Add 13

4. Add 6

5. Add 9

6. Add 15

7. Subtract 14

8. Add 7

9. Subtract 5

10. Add 9

11. Subtract 11

12. Subtract 5





Determine what rule the function machine is using.

Answers

|             |            |       |            |
|-------------|------------|-------|------------|
| Subtract 14 | Add 7      | Add 9 | Subtract 6 |
| Subtract 11 | Subtract 5 | Add 6 | Add 13     |
| Add 15      |            |       |            |

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

1)

| Input (o) | Output (j) |
|-----------|------------|
| 36        | 30         |
| 37        | 31         |
| 53        | 47         |
| 18        | 12         |
| 39        | 33         |

2)

| Input (m) | Output (h) |
|-----------|------------|
| 35        | 24         |
| 47        | 36         |
| 61        | 50         |
| 45        | 34         |
| 29        | 18         |

3)

| Input (g) | Output (f) |
|-----------|------------|
| 33        | 46         |
| 31        | 44         |
| 20        | 33         |
| 18        | 31         |
| 21        | 34         |

4)

| Input (j) | Output (t) |
|-----------|------------|
| 15        | 21         |
| 35        | 41         |
| 34        | 40         |
| 38        | 44         |
| 37        | 43         |

5)

| Input (h) | Output (l) |
|-----------|------------|
| 27        | 36         |
| 32        | 41         |
| 45        | 54         |
| 40        | 49         |
| 49        | 58         |

6)

| Input (z) | Output (j) |
|-----------|------------|
| 10        | 25         |
| 43        | 58         |
| 20        | 35         |
| 28        | 43         |
| 18        | 33         |

7)

| In (s)  | 61 | 60 | 34 | 25 |
|---------|----|----|----|----|
| Out (q) | 47 | 46 | 20 | 11 |

8)

| In (g)  | 16 | 12 | 21 | 41 |
|---------|----|----|----|----|
| Out (w) | 23 | 19 | 28 | 48 |

9)

| In (e)  | 46 | 39 | 33 | 25 |
|---------|----|----|----|----|
| Out (g) | 41 | 34 | 28 | 20 |



Determine what rule the function machine is using.

Answers

1)

| Input (s) | Output (w) |
|-----------|------------|
| 29        | 21         |
| 49        | 41         |
| 42        | 34         |
| 48        | 40         |
| 46        | 38         |

2)

| Input (r) | Output (b) |
|-----------|------------|
| 38        | 25         |
| 32        | 19         |
| 34        | 21         |
| 44        | 31         |
| 42        | 29         |

3)

| Input (f) | Output (r) |
|-----------|------------|
| 45        | 55         |
| 25        | 35         |
| 41        | 51         |
| 40        | 50         |
| 11        | 21         |

4)

| Input (a) | Output (t) |
|-----------|------------|
| 15        | 28         |
| 21        | 34         |
| 31        | 44         |
| 29        | 42         |
| 32        | 45         |

5)

| Input (w) | Output (r) |
|-----------|------------|
| 33        | 38         |
| 44        | 49         |
| 35        | 40         |
| 23        | 28         |
| 17        | 22         |

6)

| Input (c) | Output (j) |
|-----------|------------|
| 48        | 55         |
| 10        | 17         |
| 31        | 38         |
| 40        | 47         |
| 43        | 50         |

7)

| In (n)  | 50 | 23 | 29 | 30 |
|---------|----|----|----|----|
| Out (p) | 55 | 28 | 34 | 35 |

8)

| In (c)  | 16 | 37 | 27 | 45 |
|---------|----|----|----|----|
| Out (q) | 30 | 51 | 41 | 59 |

9)

| In (m)  | 34 | 20 | 27 | 54 |
|---------|----|----|----|----|
| Out (b) | 29 | 15 | 22 | 49 |

10)

| In (b)  | 61 | 51 | 42 | 50 |
|---------|----|----|----|----|
| Out (y) | 47 | 37 | 28 | 36 |

11)

| In (e)  | 27 | 36 | 43 | 60 |
|---------|----|----|----|----|
| Out (u) | 17 | 26 | 33 | 50 |

12)

| In (l)  | 46 | 19 | 28 | 32 |
|---------|----|----|----|----|
| Out (a) | 40 | 13 | 22 | 26 |

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



Determine what rule the function machine is using.

1)

| Input (s) | Output (w) |
|-----------|------------|
| 29        | 21         |
| 49        | 41         |
| 42        | 34         |
| 48        | 40         |
| 46        | 38         |

Subtract 8

2)

| Input (r) | Output (b) |
|-----------|------------|
| 38        | 25         |
| 32        | 19         |
| 34        | 21         |
| 44        | 31         |
| 42        | 29         |

Subtract 13

3)

| Input (f) | Output (r) |
|-----------|------------|
| 45        | 55         |
| 25        | 35         |
| 41        | 51         |
| 40        | 50         |
| 11        | 21         |

Add 10

4)

| Input (a) | Output (t) |
|-----------|------------|
| 15        | 28         |
| 21        | 34         |
| 31        | 44         |
| 29        | 42         |
| 32        | 45         |

Add 13

5)

| Input (w) | Output (r) |
|-----------|------------|
| 33        | 38         |
| 44        | 49         |
| 35        | 40         |
| 23        | 28         |
| 17        | 22         |

Add 5

6)

| Input (c) | Output (j) |
|-----------|------------|
| 48        | 55         |
| 10        | 17         |
| 31        | 38         |
| 40        | 47         |
| 43        | 50         |

Add 7

7)

| In (n)  | 50 | 23 | 29 | 30 |
|---------|----|----|----|----|
| Out (p) | 55 | 28 | 34 | 35 |

Add 5

8)

| In (c)  | 16 | 37 | 27 | 45 |
|---------|----|----|----|----|
| Out (q) | 30 | 51 | 41 | 59 |

Add 14

9)

| In (m)  | 34 | 20 | 27 | 54 |
|---------|----|----|----|----|
| Out (b) | 29 | 15 | 22 | 49 |

Subtract 5

10)

| In (b)  | 61 | 51 | 42 | 50 |
|---------|----|----|----|----|
| Out (y) | 47 | 37 | 28 | 36 |

Subtract 14

11)

| In (e)  | 27 | 36 | 43 | 60 |
|---------|----|----|----|----|
| Out (u) | 17 | 26 | 33 | 50 |

Subtract 10

12)

| In (l)  | 46 | 19 | 28 | 32 |
|---------|----|----|----|----|
| Out (a) | 40 | 13 | 22 | 26 |

Subtract 6

Answers

1. Subtract 8

2. Subtract 13

3. Add 10

4. Add 13

5. Add 5

6. Add 7

7. Add 5

8. Add 14

9. Subtract 5

10. Subtract 14

11. Subtract 10

12. Subtract 6



Determine what rule the function machine is using.

Answers

Subtract 8

Add 10

Subtract 13

Add 5

Add 7

Add 14

Add 13

Add 5

Subtract 5

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

1)

| Input (s) | Output (w) |
|-----------|------------|
| 29        | 21         |
| 49        | 41         |
| 42        | 34         |
| 48        | 40         |
| 46        | 38         |

2)

| Input (r) | Output (b) |
|-----------|------------|
| 38        | 25         |
| 32        | 19         |
| 34        | 21         |
| 44        | 31         |
| 42        | 29         |

3)

| Input (f) | Output (r) |
|-----------|------------|
| 45        | 55         |
| 25        | 35         |
| 41        | 51         |
| 40        | 50         |
| 11        | 21         |

4)

| Input (a) | Output (t) |
|-----------|------------|
| 15        | 28         |
| 21        | 34         |
| 31        | 44         |
| 29        | 42         |
| 32        | 45         |

5)

| Input (w) | Output (r) |
|-----------|------------|
| 33        | 38         |
| 44        | 49         |
| 35        | 40         |
| 23        | 28         |
| 17        | 22         |

6)

| Input (c) | Output (j) |
|-----------|------------|
| 48        | 55         |
| 10        | 17         |
| 31        | 38         |
| 40        | 47         |
| 43        | 50         |

7)

| In (n)  | 50 | 23 | 29 | 30 |
|---------|----|----|----|----|
| Out (p) | 55 | 28 | 34 | 35 |

8)

| In (c)  | 16 | 37 | 27 | 45 |
|---------|----|----|----|----|
| Out (q) | 30 | 51 | 41 | 59 |

9)

| In (m)  | 34 | 20 | 27 | 54 |
|---------|----|----|----|----|
| Out (b) | 29 | 15 | 22 | 49 |



Determine what rule the function machine is using.

1)

| Input (z) | Output (q) |
|-----------|------------|
| 37        | 45         |
| 48        | 56         |
| 29        | 37         |
| 50        | 58         |
| 10        | 18         |

2)

| Input (f) | Output (h) |
|-----------|------------|
| 34        | 26         |
| 54        | 46         |
| 36        | 28         |
| 48        | 40         |
| 37        | 29         |

3)

| Input (g) | Output (h) |
|-----------|------------|
| 13        | 22         |
| 41        | 50         |
| 46        | 55         |
| 25        | 34         |
| 40        | 49         |

4)

| Input (p) | Output (a) |
|-----------|------------|
| 30        | 39         |
| 36        | 45         |
| 47        | 56         |
| 19        | 28         |
| 32        | 41         |

5)

| Input (l) | Output (o) |
|-----------|------------|
| 63        | 48         |
| 29        | 14         |
| 44        | 29         |
| 43        | 28         |
| 47        | 32         |

6)

| Input (t) | Output (l) |
|-----------|------------|
| 17        | 11         |
| 53        | 47         |
| 42        | 36         |
| 51        | 45         |
| 46        | 40         |

7)

| In (m)  | 23 | 34 | 31 | 20 |
|---------|----|----|----|----|
| Out (k) | 17 | 28 | 25 | 14 |

8)

| In (e)  | 37 | 24 | 20 | 34 |
|---------|----|----|----|----|
| Out (s) | 46 | 33 | 29 | 43 |

9)

| In (y)  | 17 | 41 | 24 | 30 |
|---------|----|----|----|----|
| Out (i) | 22 | 46 | 29 | 35 |

10)

| In (w)  | 38 | 49 | 34 | 52 |
|---------|----|----|----|----|
| Out (t) | 25 | 36 | 21 | 39 |

11)

| In (g)  | 16 | 24 | 45 | 38 |
|---------|----|----|----|----|
| Out (v) | 25 | 33 | 54 | 47 |

12)

| In (q)  | 49 | 34 | 12 | 32 |
|---------|----|----|----|----|
| Out (y) | 62 | 47 | 25 | 45 |

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 (q) |
|-----------|------------|
| 37        | 45         |
| 48        | 56         |
| 29        | 37         |
| 50        | 58         |
| 10        | 18         |

Add 8

2)

| Input (f) | Output (h) |
|-----------|------------|
| 34        | 26         |
| 54        | 46         |
| 36        | 28         |
| 48        | 40         |
| 37        | 29         |

Subtract 8

3)

| Input (g) | Output (h) |
|-----------|------------|
| 13        | 22         |
| 41        | 50         |
| 46        | 55         |
| 25        | 34         |
| 40        | 49         |

Add 9

4)

| Input (p) | Output (a) |
|-----------|------------|
| 30        | 39         |
| 36        | 45         |
| 47        | 56         |
| 19        | 28         |
| 32        | 41         |

Add 9

5)

| Input (l) | Output (o) |
|-----------|------------|
| 63        | 48         |
| 29        | 14         |
| 44        | 29         |
| 43        | 28         |
| 47        | 32         |

Subtract 15

6)

| Input (t) | Output (l) |
|-----------|------------|
| 17        | 11         |
| 53        | 47         |
| 42        | 36         |
| 51        | 45         |
| 46        | 40         |

Subtract 6

7)

| In (m)  | 23 | 34 | 31 | 20 |
|---------|----|----|----|----|
| Out (k) | 17 | 28 | 25 | 14 |

Subtract 6

8)

| In (e)  | 37 | 24 | 20 | 34 |
|---------|----|----|----|----|
| Out (s) | 46 | 33 | 29 | 43 |

Add 9

9)

| In (y)  | 17 | 41 | 24 | 30 |
|---------|----|----|----|----|
| Out (i) | 22 | 46 | 29 | 35 |

Add 5

10)

| In (w)  | 38 | 49 | 34 | 52 |
|---------|----|----|----|----|
| Out (t) | 25 | 36 | 21 | 39 |

Subtract 13

11)

| In (g)  | 16 | 24 | 45 | 38 |
|---------|----|----|----|----|
| Out (v) | 25 | 33 | 54 | 47 |

Add 9

12)

| In (q)  | 49 | 34 | 12 | 32 |
|---------|----|----|----|----|
| Out (y) | 62 | 47 | 25 | 45 |

Add 13

Answers

1. Add 8

2. Subtract 8

3. Add 9

4. Add 9

5. Subtract 15

6. Subtract 6

7. Subtract 6

8. Add 9

9. Add 5

10. Subtract 13

11. Add 9

12. Add 13



Determine what rule the function machine is using.

Answers

Subtract 8  
Subtract 15  
Add 9

Subtract 6  
Add 8

Subtract 6  
Add 9

Add 9  
Add 5

1)

| Input (z) | Output (q) |
|-----------|------------|
| 37        | 45         |
| 48        | 56         |
| 29        | 37         |
| 50        | 58         |
| 10        | 18         |

2)

| Input (f) | Output (h) |
|-----------|------------|
| 34        | 26         |
| 54        | 46         |
| 36        | 28         |
| 48        | 40         |
| 37        | 29         |

3)

| Input (g) | Output (h) |
|-----------|------------|
| 13        | 22         |
| 41        | 50         |
| 46        | 55         |
| 25        | 34         |
| 40        | 49         |

4)

| Input (p) | Output (a) |
|-----------|------------|
| 30        | 39         |
| 36        | 45         |
| 47        | 56         |
| 19        | 28         |
| 32        | 41         |

5)

| Input (l) | Output (o) |
|-----------|------------|
| 63        | 48         |
| 29        | 14         |
| 44        | 29         |
| 43        | 28         |
| 47        | 32         |

6)

| Input (t) | Output (l) |
|-----------|------------|
| 17        | 11         |
| 53        | 47         |
| 42        | 36         |
| 51        | 45         |
| 46        | 40         |

7)

| In (m)  | 23 | 34 | 31 | 20 |
|---------|----|----|----|----|
| Out (k) | 17 | 28 | 25 | 14 |

8)

| In (e)  | 37 | 24 | 20 | 34 |
|---------|----|----|----|----|
| Out (s) | 46 | 33 | 29 | 43 |

9)

| In (y)  | 17 | 41 | 24 | 30 |
|---------|----|----|----|----|
| Out (i) | 22 | 46 | 29 | 35 |

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



Determine what rule the function machine is using.

1)

| Input (j) | Output (d) |
|-----------|------------|
| 18        | 27         |
| 31        | 40         |
| 46        | 55         |
| 49        | 58         |
| 25        | 34         |

2)

| Input (c) | Output (l) |
|-----------|------------|
| 20        | 35         |
| 12        | 27         |
| 50        | 65         |
| 21        | 36         |
| 33        | 48         |

3)

| Input (c) | Output (b) |
|-----------|------------|
| 56        | 46         |
| 52        | 42         |
| 49        | 39         |
| 34        | 24         |
| 45        | 35         |

4)

| Input (v) | Output (j) |
|-----------|------------|
| 13        | 24         |
| 48        | 59         |
| 34        | 45         |
| 35        | 46         |
| 43        | 54         |

5)

| Input (g) | Output (h) |
|-----------|------------|
| 46        | 33         |
| 35        | 22         |
| 57        | 44         |
| 56        | 43         |
| 62        | 49         |

6)

| Input (e) | Output (f) |
|-----------|------------|
| 19        | 31         |
| 43        | 55         |
| 31        | 43         |
| 25        | 37         |
| 26        | 38         |

7)

| In (g)  | 50 | 28 | 44 | 13 |
|---------|----|----|----|----|
| Out (c) | 55 | 33 | 49 | 18 |

8)

| In (a)  | 24 | 26 | 59 | 53 |
|---------|----|----|----|----|
| Out (p) | 14 | 16 | 49 | 43 |

9)

| In (y)  | 60 | 36 | 59 | 45 |
|---------|----|----|----|----|
| Out (q) | 49 | 25 | 48 | 34 |

10)

| In (e)  | 34 | 33 | 28 | 42 |
|---------|----|----|----|----|
| Out (j) | 21 | 20 | 15 | 29 |

11)

| In (i)  | 44 | 20 | 24 | 17 |
|---------|----|----|----|----|
| Out (h) | 54 | 30 | 34 | 27 |

12)

| In (c)  | 54 | 39 | 30 | 35 |
|---------|----|----|----|----|
| Out (f) | 49 | 34 | 25 | 30 |

Answers

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





Determine what rule the function machine is using.

1)

| Input (j) | Output (d) |
|-----------|------------|
| 18        | 27         |
| 31        | 40         |
| 46        | 55         |
| 49        | 58         |
| 25        | 34         |

Add 9

2)

| Input (c) | Output (l) |
|-----------|------------|
| 20        | 35         |
| 12        | 27         |
| 50        | 65         |
| 21        | 36         |
| 33        | 48         |

Add 15

3)

| Input (c) | Output (b) |
|-----------|------------|
| 56        | 46         |
| 52        | 42         |
| 49        | 39         |
| 34        | 24         |
| 45        | 35         |

Subtract 10

4)

| Input (v) | Output (j) |
|-----------|------------|
| 13        | 24         |
| 48        | 59         |
| 34        | 45         |
| 35        | 46         |
| 43        | 54         |

Add 11

5)

| Input (g) | Output (h) |
|-----------|------------|
| 46        | 33         |
| 35        | 22         |
| 57        | 44         |
| 56        | 43         |
| 62        | 49         |

Subtract 13

6)

| Input (e) | Output (f) |
|-----------|------------|
| 19        | 31         |
| 43        | 55         |
| 31        | 43         |
| 25        | 37         |
| 26        | 38         |

Add 12

7)

| In (g)  | 50 | 28 | 44 | 13 |
|---------|----|----|----|----|
| Out (c) | 55 | 33 | 49 | 18 |

Add 5

8)

| In (a)  | 24 | 26 | 59 | 53 |
|---------|----|----|----|----|
| Out (p) | 14 | 16 | 49 | 43 |

Subtract 10

9)

| In (y)  | 60 | 36 | 59 | 45 |
|---------|----|----|----|----|
| Out (q) | 49 | 25 | 48 | 34 |

Subtract 11

10)

| In (e)  | 34 | 33 | 28 | 42 |
|---------|----|----|----|----|
| Out (j) | 21 | 20 | 15 | 29 |

Subtract 13

11)

| In (i)  | 44 | 20 | 24 | 17 |
|---------|----|----|----|----|
| Out (h) | 54 | 30 | 34 | 27 |

Add 10

12)

| In (c)  | 54 | 39 | 30 | 35 |
|---------|----|----|----|----|
| Out (f) | 49 | 34 | 25 | 30 |

Subtract 5

Answers

1. Add 9

2. Add 15

3. Subtract 10

4. Add 11

5. Subtract 13

6. Add 12

7. Add 5

8. Subtract 10

9. Subtract 11

10. Subtract 13

11. Add 10

12. Subtract 5



Determine what rule the function machine is using.

Answers

|             |        |        |             |
|-------------|--------|--------|-------------|
| Subtract 10 | Add 12 | Add 15 | Subtract 11 |
| Subtract 10 | Add 5  | Add 11 | Subtract 13 |
| Add 9       |        |        |             |

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

1)

| Input (j) | Output (d) |
|-----------|------------|
| 18        | 27         |
| 31        | 40         |
| 46        | 55         |
| 49        | 58         |
| 25        | 34         |

2)

| Input (c) | Output (l) |
|-----------|------------|
| 20        | 35         |
| 12        | 27         |
| 50        | 65         |
| 21        | 36         |
| 33        | 48         |

3)

| Input (c) | Output (b) |
|-----------|------------|
| 56        | 46         |
| 52        | 42         |
| 49        | 39         |
| 34        | 24         |
| 45        | 35         |

4)

| Input (v) | Output (j) |
|-----------|------------|
| 13        | 24         |
| 48        | 59         |
| 34        | 45         |
| 35        | 46         |
| 43        | 54         |

5)

| Input (g) | Output (h) |
|-----------|------------|
| 46        | 33         |
| 35        | 22         |
| 57        | 44         |
| 56        | 43         |
| 62        | 49         |

6)

| Input (e) | Output (f) |
|-----------|------------|
| 19        | 31         |
| 43        | 55         |
| 31        | 43         |
| 25        | 37         |
| 26        | 38         |

7)

| In (g)  | 50 | 28 | 44 | 13 |
|---------|----|----|----|----|
| Out (c) | 55 | 33 | 49 | 18 |

8)

| In (a)  | 24 | 26 | 59 | 53 |
|---------|----|----|----|----|
| Out (p) | 14 | 16 | 49 | 43 |

9)

| In (y)  | 60 | 36 | 59 | 45 |
|---------|----|----|----|----|
| Out (q) | 49 | 25 | 48 | 34 |



Determine what rule the function machine is using.

1)

| Input (b) | Output (d) |
|-----------|------------|
| 17        | 12         |
| 52        | 47         |
| 53        | 48         |
| 37        | 32         |
| 36        | 31         |

2)

| Input (i) | Output (m) |
|-----------|------------|
| 29        | 23         |
| 53        | 47         |
| 35        | 29         |
| 17        | 11         |
| 23        | 17         |

3)

| Input (i) | Output (m) |
|-----------|------------|
| 24        | 33         |
| 14        | 23         |
| 38        | 47         |
| 17        | 26         |
| 29        | 38         |

4)

| Input (j) | Output (y) |
|-----------|------------|
| 42        | 30         |
| 41        | 29         |
| 53        | 41         |
| 33        | 21         |
| 43        | 31         |

5)

| Input (z) | Output (y) |
|-----------|------------|
| 28        | 36         |
| 27        | 35         |
| 41        | 49         |
| 24        | 32         |
| 32        | 40         |

6)

| Input (j) | Output (b) |
|-----------|------------|
| 26        | 11         |
| 50        | 35         |
| 41        | 26         |
| 54        | 39         |
| 56        | 41         |

7)

| In (d)  | 26 | 50 | 30 | 24 |
|---------|----|----|----|----|
| Out (b) | 37 | 61 | 41 | 35 |

8)

| In (a)  | 30 | 43 | 19 | 12 |
|---------|----|----|----|----|
| Out (u) | 40 | 53 | 29 | 22 |

9)

| In (c)  | 38 | 34 | 42 | 32 |
|---------|----|----|----|----|
| Out (z) | 30 | 26 | 34 | 24 |

10)

| In (t)  | 34 | 37 | 15 | 10 |
|---------|----|----|----|----|
| Out (n) | 44 | 47 | 25 | 20 |

11)

| In (p)  | 37 | 43 | 50 | 45 |
|---------|----|----|----|----|
| Out (i) | 52 | 58 | 65 | 60 |

12)

| In (d)  | 38 | 36 | 29 | 60 |
|---------|----|----|----|----|
| Out (n) | 24 | 22 | 15 | 46 |

Answers

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



Determine what rule the function machine is using.

1)

| Input (b) | Output (d) |
|-----------|------------|
| 17        | 12         |
| 52        | 47         |
| 53        | 48         |
| 37        | 32         |
| 36        | 31         |

Subtract 5

2)

| Input (i) | Output (m) |
|-----------|------------|
| 29        | 23         |
| 53        | 47         |
| 35        | 29         |
| 17        | 11         |
| 23        | 17         |

Subtract 6

3)

| Input (i) | Output (m) |
|-----------|------------|
| 24        | 33         |
| 14        | 23         |
| 38        | 47         |
| 17        | 26         |
| 29        | 38         |

Add 9

4)

| Input (j) | Output (y) |
|-----------|------------|
| 42        | 30         |
| 41        | 29         |
| 53        | 41         |
| 33        | 21         |
| 43        | 31         |

Subtract 12

5)

| Input (z) | Output (y) |
|-----------|------------|
| 28        | 36         |
| 27        | 35         |
| 41        | 49         |
| 24        | 32         |
| 32        | 40         |

Add 8

6)

| Input (j) | Output (b) |
|-----------|------------|
| 26        | 11         |
| 50        | 35         |
| 41        | 26         |
| 54        | 39         |
| 56        | 41         |

Subtract 15

7)

| In (d)  | 26 | 50 | 30 | 24 |
|---------|----|----|----|----|
| Out (b) | 37 | 61 | 41 | 35 |

Add 11

8)

| In (a)  | 30 | 43 | 19 | 12 |
|---------|----|----|----|----|
| Out (u) | 40 | 53 | 29 | 22 |

Add 10

9)

| In (c)  | 38 | 34 | 42 | 32 |
|---------|----|----|----|----|
| Out (z) | 30 | 26 | 34 | 24 |

Subtract 8

10)

| In (t)  | 34 | 37 | 15 | 10 |
|---------|----|----|----|----|
| Out (n) | 44 | 47 | 25 | 20 |

Add 10

11)

| In (p)  | 37 | 43 | 50 | 45 |
|---------|----|----|----|----|
| Out (i) | 52 | 58 | 65 | 60 |

Add 15

12)

| In (d)  | 38 | 36 | 29 | 60 |
|---------|----|----|----|----|
| Out (n) | 24 | 22 | 15 | 46 |

Subtract 14

Answers

1. Subtract 5

2. Subtract 6

3. Add 9

4. Subtract 12

5. Add 8

6. Subtract 15

7. Add 11

8. Add 10

9. Subtract 8

10. Add 10

11. Add 15

12. Subtract 14



Determine what rule the function machine is using.

Answers

- |             |        |            |             |
|-------------|--------|------------|-------------|
| Subtract 15 | Add 10 | Add 8      | Subtract 12 |
| Subtract 8  | Add 9  | Subtract 6 | Subtract 5  |
| Add 11      |        |            |             |

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

1)

| Input (b) | Output (d) |
|-----------|------------|
| 17        | 12         |
| 52        | 47         |
| 53        | 48         |
| 37        | 32         |
| 36        | 31         |

2)

| Input (i) | Output (m) |
|-----------|------------|
| 29        | 23         |
| 53        | 47         |
| 35        | 29         |
| 17        | 11         |
| 23        | 17         |

3)

| Input (i) | Output (m) |
|-----------|------------|
| 24        | 33         |
| 14        | 23         |
| 38        | 47         |
| 17        | 26         |
| 29        | 38         |

4)

| Input (j) | Output (y) |
|-----------|------------|
| 42        | 30         |
| 41        | 29         |
| 53        | 41         |
| 33        | 21         |
| 43        | 31         |

5)

| Input (z) | Output (y) |
|-----------|------------|
| 28        | 36         |
| 27        | 35         |
| 41        | 49         |
| 24        | 32         |
| 32        | 40         |

6)

| Input (j) | Output (b) |
|-----------|------------|
| 26        | 11         |
| 50        | 35         |
| 41        | 26         |
| 54        | 39         |
| 56        | 41         |

7)

| In (d)  | 26 | 50 | 30 | 24 |
|---------|----|----|----|----|
| Out (b) | 37 | 61 | 41 | 35 |

8)

| In (a)  | 30 | 43 | 19 | 12 |
|---------|----|----|----|----|
| Out (u) | 40 | 53 | 29 | 22 |

9)

| In (c)  | 38 | 34 | 42 | 32 |
|---------|----|----|----|----|
| Out (z) | 30 | 26 | 34 | 24 |



Determine what rule the function machine is using.

1)

| Input (z) | Output (k) |
|-----------|------------|
| 54        | 49         |
| 18        | 13         |
| 38        | 33         |
| 41        | 36         |
| 39        | 34         |

2)

| Input (h) | Output (y) |
|-----------|------------|
| 19        | 12         |
| 32        | 25         |
| 39        | 32         |
| 48        | 41         |
| 26        | 19         |

3)

| Input (v) | Output (m) |
|-----------|------------|
| 37        | 51         |
| 33        | 47         |
| 14        | 28         |
| 19        | 33         |
| 46        | 60         |

4)

| Input (s) | Output (k) |
|-----------|------------|
| 37        | 44         |
| 49        | 56         |
| 39        | 46         |
| 11        | 18         |
| 31        | 38         |

5)

| Input (d) | Output (q) |
|-----------|------------|
| 37        | 50         |
| 30        | 43         |
| 22        | 35         |
| 31        | 44         |
| 43        | 56         |

6)

| Input (j) | Output (p) |
|-----------|------------|
| 28        | 16         |
| 60        | 48         |
| 53        | 41         |
| 29        | 17         |
| 37        | 25         |

7)

| In (z)  | 50 | 48 | 65 | 64 |
|---------|----|----|----|----|
| Out (n) | 35 | 33 | 50 | 49 |

8)

| In (q)  | 33 | 26 | 19 | 54 |
|---------|----|----|----|----|
| Out (y) | 24 | 17 | 10 | 45 |

9)

| In (k)  | 19 | 37 | 47 | 27 |
|---------|----|----|----|----|
| Out (p) | 24 | 42 | 52 | 32 |

10)

| In (o)  | 37 | 18 | 24 | 20 |
|---------|----|----|----|----|
| Out (l) | 50 | 31 | 37 | 33 |

11)

| In (f)  | 41 | 11 | 22 | 42 |
|---------|----|----|----|----|
| Out (j) | 54 | 24 | 35 | 55 |

12)

| In (s)  | 41 | 42 | 43 | 27 |
|---------|----|----|----|----|
| Out (e) | 35 | 36 | 37 | 21 |

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 (k) |
|-----------|------------|
| 54        | 49         |
| 18        | 13         |
| 38        | 33         |
| 41        | 36         |
| 39        | 34         |

Subtract 5

2)

| Input (h) | Output (y) |
|-----------|------------|
| 19        | 12         |
| 32        | 25         |
| 39        | 32         |
| 48        | 41         |
| 26        | 19         |

Subtract 7

3)

| Input (v) | Output (m) |
|-----------|------------|
| 37        | 51         |
| 33        | 47         |
| 14        | 28         |
| 19        | 33         |
| 46        | 60         |

Add 14

4)

| Input (s) | Output (k) |
|-----------|------------|
| 37        | 44         |
| 49        | 56         |
| 39        | 46         |
| 11        | 18         |
| 31        | 38         |

Add 7

5)

| Input (d) | Output (q) |
|-----------|------------|
| 37        | 50         |
| 30        | 43         |
| 22        | 35         |
| 31        | 44         |
| 43        | 56         |

Add 13

6)

| Input (j) | Output (p) |
|-----------|------------|
| 28        | 16         |
| 60        | 48         |
| 53        | 41         |
| 29        | 17         |
| 37        | 25         |

Subtract 12

7)

| In (z)  | 50 | 48 | 65 | 64 |
|---------|----|----|----|----|
| Out (n) | 35 | 33 | 50 | 49 |

Subtract 15

8)

| In (q)  | 33 | 26 | 19 | 54 |
|---------|----|----|----|----|
| Out (y) | 24 | 17 | 10 | 45 |

Subtract 9

9)

| In (k)  | 19 | 37 | 47 | 27 |
|---------|----|----|----|----|
| Out (p) | 24 | 42 | 52 | 32 |

Add 5

10)

| In (o)  | 37 | 18 | 24 | 20 |
|---------|----|----|----|----|
| Out (l) | 50 | 31 | 37 | 33 |

Add 13

11)

| In (f)  | 41 | 11 | 22 | 42 |
|---------|----|----|----|----|
| Out (j) | 54 | 24 | 35 | 55 |

Add 13

12)

| In (s)  | 41 | 42 | 43 | 27 |
|---------|----|----|----|----|
| Out (e) | 35 | 36 | 37 | 21 |

Subtract 6

Answers

1. Subtract 5

2. Subtract 7

3. Add 14

4. Add 7

5. Add 13

6. Subtract 12

7. Subtract 15

8. Subtract 9

9. Add 5

10. Add 13

11. Add 13

12. Subtract 6



Determine what rule the function machine is using.

Answers

|             |            |             |            |
|-------------|------------|-------------|------------|
| Subtract 12 | Add 7      | Add 14      | Subtract 5 |
| Subtract 9  | Subtract 7 | Subtract 15 | Add 13     |
| Add 5       |            |             |            |

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

1)

| Input (z) | Output (k) |
|-----------|------------|
| 54        | 49         |
| 18        | 13         |
| 38        | 33         |
| 41        | 36         |
| 39        | 34         |

2)

| Input (h) | Output (y) |
|-----------|------------|
| 19        | 12         |
| 32        | 25         |
| 39        | 32         |
| 48        | 41         |
| 26        | 19         |

3)

| Input (v) | Output (m) |
|-----------|------------|
| 37        | 51         |
| 33        | 47         |
| 14        | 28         |
| 19        | 33         |
| 46        | 60         |

4)

| Input (s) | Output (k) |
|-----------|------------|
| 37        | 44         |
| 49        | 56         |
| 39        | 46         |
| 11        | 18         |
| 31        | 38         |

5)

| Input (d) | Output (q) |
|-----------|------------|
| 37        | 50         |
| 30        | 43         |
| 22        | 35         |
| 31        | 44         |
| 43        | 56         |

6)

| Input (j) | Output (p) |
|-----------|------------|
| 28        | 16         |
| 60        | 48         |
| 53        | 41         |
| 29        | 17         |
| 37        | 25         |

7)

| In (z)  | 50 | 48 | 65 | 64 |
|---------|----|----|----|----|
| Out (n) | 35 | 33 | 50 | 49 |

8)

| In (q)  | 33 | 26 | 19 | 54 |
|---------|----|----|----|----|
| Out (y) | 24 | 17 | 10 | 45 |

9)

| In (k)  | 19 | 37 | 47 | 27 |
|---------|----|----|----|----|
| Out (p) | 24 | 42 | 52 | 32 |





Determine what rule the function machine is using.

1)

| Input (z) | Output (e) |
|-----------|------------|
| 33        | 47         |
| 27        | 41         |
| 20        | 34         |
| 19        | 33         |
| 40        | 54         |

2)

| Input (m) | Output (i) |
|-----------|------------|
| 54        | 39         |
| 28        | 13         |
| 43        | 28         |
| 60        | 45         |
| 30        | 15         |

3)

| Input (z) | Output (p) |
|-----------|------------|
| 39        | 34         |
| 29        | 24         |
| 18        | 13         |
| 46        | 41         |
| 35        | 30         |

4)

| Input (z) | Output (h) |
|-----------|------------|
| 47        | 59         |
| 43        | 55         |
| 26        | 38         |
| 44        | 56         |
| 17        | 29         |

5)

| Input (u) | Output (n) |
|-----------|------------|
| 31        | 16         |
| 58        | 43         |
| 26        | 11         |
| 29        | 14         |
| 54        | 39         |

6)

| Input (h) | Output (f) |
|-----------|------------|
| 52        | 44         |
| 46        | 38         |
| 18        | 10         |
| 29        | 21         |
| 19        | 11         |

7)

| In (t)  | 15 | 14 | 39 | 23 |
|---------|----|----|----|----|
| Out (h) | 20 | 19 | 44 | 28 |

8)

| In (c)  | 40 | 43 | 26 | 32 |
|---------|----|----|----|----|
| Out (g) | 55 | 58 | 41 | 47 |

9)

| In (e)  | 14 | 25 | 15 | 27 |
|---------|----|----|----|----|
| Out (j) | 26 | 37 | 27 | 39 |

10)

| In (o)  | 24 | 61 | 45 | 28 |
|---------|----|----|----|----|
| Out (h) | 11 | 48 | 32 | 15 |

11)

| In (o)  | 11 | 41 | 15 | 26 |
|---------|----|----|----|----|
| Out (y) | 16 | 46 | 20 | 31 |

12)

| In (k)  | 54 | 37 | 15 | 41 |
|---------|----|----|----|----|
| Out (a) | 49 | 32 | 10 | 36 |

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 (e) |
|-----------|------------|
| 33        | 47         |
| 27        | 41         |
| 20        | 34         |
| 19        | 33         |
| 40        | 54         |

Add 14

2)

| Input (m) | Output (i) |
|-----------|------------|
| 54        | 39         |
| 28        | 13         |
| 43        | 28         |
| 60        | 45         |
| 30        | 15         |

Subtract 15

3)

| Input (z) | Output (p) |
|-----------|------------|
| 39        | 34         |
| 29        | 24         |
| 18        | 13         |
| 46        | 41         |
| 35        | 30         |

Subtract 5

4)

| Input (z) | Output (h) |
|-----------|------------|
| 47        | 59         |
| 43        | 55         |
| 26        | 38         |
| 44        | 56         |
| 17        | 29         |

Add 12

5)

| Input (u) | Output (n) |
|-----------|------------|
| 31        | 16         |
| 58        | 43         |
| 26        | 11         |
| 29        | 14         |
| 54        | 39         |

Subtract 15

6)

| Input (h) | Output (f) |
|-----------|------------|
| 52        | 44         |
| 46        | 38         |
| 18        | 10         |
| 29        | 21         |
| 19        | 11         |

Subtract 8

7)

| In (t)  | 15 | 14 | 39 | 23 |
|---------|----|----|----|----|
| Out (h) | 20 | 19 | 44 | 28 |

Add 5

8)

| In (c)  | 40 | 43 | 26 | 32 |
|---------|----|----|----|----|
| Out (g) | 55 | 58 | 41 | 47 |

Add 15

9)

| In (e)  | 14 | 25 | 15 | 27 |
|---------|----|----|----|----|
| Out (j) | 26 | 37 | 27 | 39 |

Add 12

10)

| In (o)  | 24 | 61 | 45 | 28 |
|---------|----|----|----|----|
| Out (h) | 11 | 48 | 32 | 15 |

Subtract 13

11)

| In (o)  | 11 | 41 | 15 | 26 |
|---------|----|----|----|----|
| Out (y) | 16 | 46 | 20 | 31 |

Add 5

12)

| In (k)  | 54 | 37 | 15 | 41 |
|---------|----|----|----|----|
| Out (a) | 49 | 32 | 10 | 36 |

Subtract 5

Answers

1. Add 14

2. Subtract 15

3. Subtract 5

4. Add 12

5. Subtract 15

6. Subtract 8

7. Add 5

8. Add 15

9. Add 12

10. Subtract 13

11. Add 5

12. Subtract 5



Determine what rule the function machine is using.

Answers

|            |             |             |            |
|------------|-------------|-------------|------------|
| Add 14     | Add 15      | Subtract 15 | Subtract 5 |
| Add 12     | Subtract 15 | Add 5       | Add 12     |
| Subtract 8 |             |             |            |

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

1)

| Input (z) | Output (e) |
|-----------|------------|
| 33        | 47         |
| 27        | 41         |
| 20        | 34         |
| 19        | 33         |
| 40        | 54         |

2)

| Input (m) | Output (i) |
|-----------|------------|
| 54        | 39         |
| 28        | 13         |
| 43        | 28         |
| 60        | 45         |
| 30        | 15         |

3)

| Input (z) | Output (p) |
|-----------|------------|
| 39        | 34         |
| 29        | 24         |
| 18        | 13         |
| 46        | 41         |
| 35        | 30         |

4)

| Input (z) | Output (h) |
|-----------|------------|
| 47        | 59         |
| 43        | 55         |
| 26        | 38         |
| 44        | 56         |
| 17        | 29         |

5)

| Input (u) | Output (n) |
|-----------|------------|
| 31        | 16         |
| 58        | 43         |
| 26        | 11         |
| 29        | 14         |
| 54        | 39         |

6)

| Input (h) | Output (f) |
|-----------|------------|
| 52        | 44         |
| 46        | 38         |
| 18        | 10         |
| 29        | 21         |
| 19        | 11         |

7)

| In (t)  | 15 | 14 | 39 | 23 |
|---------|----|----|----|----|
| Out (h) | 20 | 19 | 44 | 28 |

8)

| In (c)  | 40 | 43 | 26 | 32 |
|---------|----|----|----|----|
| Out (g) | 55 | 58 | 41 | 47 |

9)

| In (e)  | 14 | 25 | 15 | 27 |
|---------|----|----|----|----|
| Out (j) | 26 | 37 | 27 | 39 |



Determine what rule the function machine is using.

1)

| Input (c) | Output (w) |
|-----------|------------|
| 38        | 53         |
| 18        | 33         |
| 26        | 41         |
| 35        | 50         |
| 16        | 31         |

2)

| Input (n) | Output (o) |
|-----------|------------|
| 37        | 45         |
| 45        | 53         |
| 42        | 50         |
| 39        | 47         |
| 35        | 43         |

3)

| Input (w) | Output (h) |
|-----------|------------|
| 57        | 48         |
| 26        | 17         |
| 37        | 28         |
| 30        | 21         |
| 58        | 49         |

4)

| Input (w) | Output (g) |
|-----------|------------|
| 30        | 15         |
| 44        | 29         |
| 25        | 10         |
| 31        | 16         |
| 51        | 36         |

5)

| Input (j) | Output (e) |
|-----------|------------|
| 42        | 54         |
| 26        | 38         |
| 11        | 23         |
| 48        | 60         |
| 43        | 55         |

6)

| Input (k) | Output (f) |
|-----------|------------|
| 46        | 35         |
| 42        | 31         |
| 58        | 47         |
| 40        | 29         |
| 34        | 23         |

7)

| In (a)  | 28 | 33 | 31 | 44 |
|---------|----|----|----|----|
| Out (n) | 42 | 47 | 45 | 58 |

8)

| In (f)  | 29 | 58 | 24 | 26 |
|---------|----|----|----|----|
| Out (a) | 18 | 47 | 13 | 15 |

9)

| In (r)  | 21 | 30 | 45 | 11 |
|---------|----|----|----|----|
| Out (a) | 29 | 38 | 53 | 19 |

10)

| In (q)  | 60 | 44 | 29 | 24 |
|---------|----|----|----|----|
| Out (n) | 48 | 32 | 17 | 12 |

11)

| In (u)  | 32 | 31 | 35 | 41 |
|---------|----|----|----|----|
| Out (k) | 17 | 16 | 20 | 26 |

12)

| In (r)  | 45 | 19 | 39 | 38 |
|---------|----|----|----|----|
| Out (e) | 55 | 29 | 49 | 48 |

Answers

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



Determine what rule the function machine is using.

1)

| Input (c) | Output (w) |
|-----------|------------|
| 38        | 53         |
| 18        | 33         |
| 26        | 41         |
| 35        | 50         |
| 16        | 31         |

Add 15

2)

| Input (n) | Output (o) |
|-----------|------------|
| 37        | 45         |
| 45        | 53         |
| 42        | 50         |
| 39        | 47         |
| 35        | 43         |

Add 8

3)

| Input (w) | Output (h) |
|-----------|------------|
| 57        | 48         |
| 26        | 17         |
| 37        | 28         |
| 30        | 21         |
| 58        | 49         |

Subtract 9

4)

| Input (w) | Output (g) |
|-----------|------------|
| 30        | 15         |
| 44        | 29         |
| 25        | 10         |
| 31        | 16         |
| 51        | 36         |

Subtract 15

5)

| Input (j) | Output (e) |
|-----------|------------|
| 42        | 54         |
| 26        | 38         |
| 11        | 23         |
| 48        | 60         |
| 43        | 55         |

Add 12

6)

| Input (k) | Output (f) |
|-----------|------------|
| 46        | 35         |
| 42        | 31         |
| 58        | 47         |
| 40        | 29         |
| 34        | 23         |

Subtract 11

7)

| In (a)  | 28 | 33 | 31 | 44 |
|---------|----|----|----|----|
| Out (n) | 42 | 47 | 45 | 58 |

Add 14

8)

| In (f)  | 29 | 58 | 24 | 26 |
|---------|----|----|----|----|
| Out (a) | 18 | 47 | 13 | 15 |

Subtract 11

9)

| In (r)  | 21 | 30 | 45 | 11 |
|---------|----|----|----|----|
| Out (a) | 29 | 38 | 53 | 19 |

Add 8

10)

| In (q)  | 60 | 44 | 29 | 24 |
|---------|----|----|----|----|
| Out (n) | 48 | 32 | 17 | 12 |

Subtract 12

11)

| In (u)  | 32 | 31 | 35 | 41 |
|---------|----|----|----|----|
| Out (k) | 17 | 16 | 20 | 26 |

Subtract 15

12)

| In (r)  | 45 | 19 | 39 | 38 |
|---------|----|----|----|----|
| Out (e) | 55 | 29 | 49 | 48 |

Add 10

Answers

1. Add 15

2. Add 8

3. Subtract 9

4. Subtract 15

5. Add 12

6. Subtract 11

7. Add 14

8. Subtract 11

9. Add 8

10. Subtract 12

11. Subtract 15

12. Add 10



Determine what rule the function machine is using.

Answers

|             |             |             |        |
|-------------|-------------|-------------|--------|
| Add 14      | Subtract 11 | Subtract 9  | Add 12 |
| Subtract 15 | Add 8       | Subtract 11 | Add 15 |
| Add 8       |             |             |        |

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

1)

| Input (c) | Output (w) |
|-----------|------------|
| 38        | 53         |
| 18        | 33         |
| 26        | 41         |
| 35        | 50         |
| 16        | 31         |

2)

| Input (n) | Output (o) |
|-----------|------------|
| 37        | 45         |
| 45        | 53         |
| 42        | 50         |
| 39        | 47         |
| 35        | 43         |

3)

| Input (w) | Output (h) |
|-----------|------------|
| 57        | 48         |
| 26        | 17         |
| 37        | 28         |
| 30        | 21         |
| 58        | 49         |

4)

| Input (w) | Output (g) |
|-----------|------------|
| 30        | 15         |
| 44        | 29         |
| 25        | 10         |
| 31        | 16         |
| 51        | 36         |

5)

| Input (j) | Output (e) |
|-----------|------------|
| 42        | 54         |
| 26        | 38         |
| 11        | 23         |
| 48        | 60         |
| 43        | 55         |

6)

| Input (k) | Output (f) |
|-----------|------------|
| 46        | 35         |
| 42        | 31         |
| 58        | 47         |
| 40        | 29         |
| 34        | 23         |

7)

| In (a)  | 28 | 33 | 31 | 44 |
|---------|----|----|----|----|
| Out (n) | 42 | 47 | 45 | 58 |

8)

| In (f)  | 29 | 58 | 24 | 26 |
|---------|----|----|----|----|
| Out (a) | 18 | 47 | 13 | 15 |

9)

| In (r)  | 21 | 30 | 45 | 11 |
|---------|----|----|----|----|
| Out (a) | 29 | 38 | 53 | 19 |