



Finding Rule w/ Two Steps

Name: _____

Determine which rule best represents the expression the function machine used.

Answers

1)

Input (M)	8	4	2	3	5
Output	31	11	1	6	16

A. $M \times 5$ B. $M \times 8 - 9$
 C. $M \times 5 + 12$ D. $M \times 5 - 9$

2)

Input (S)	5	8	2	3	4
Output	17	23	11	13	15

A. $S \times 7$ B. $S \times 2 + 7$
 C. $S \times 2 + 6$ D. $S + 7$

3)

Input (U)	11	9	10	12	15
Output	4	2	3	5	8

A. $U \times 8$ B. $U + 8$
 C. $U \times 7 + 10$ D. $U - 7$

4)

Input (P)	14	11	10	8	9
Output	8	5	4	2	3

A. $P + 9$ B. $P - 6$
 C. $P \times 9 + 9$ D. $P \times 9$

5)

Input (G)	4	2	5	3	8
Output	19	5	26	12	47

A. $G \times 9$ B. $G \times 7 - 9$
 C. $G \times 7 + 11$ D. $G \times 7$

6)

Input (R)	2	8	3	5	4
Output	10	16	11	13	12

A. $R + 3$ B. $R + 8$
 C. $R \times 12 + 3$ D. $R \times 7 - 3$

7)

Input (V)	8	2	4	3	5
Output	17	11	13	12	14

A. $V \times 14 + 2$ B. $V \times 8 - 2$
 C. $V \times 2$ D. $V + 9$

8)

Input (Z)	8	5	4	3	2
Output	24	15	12	9	6

A. $Z + 4$ B. $Z \times 3 + 5$
 C. $Z \times 3$ D. $Z \times 6 - 4$

9)

Input (Q)	5	3	4	8	2
Output	16	12	14	22	10

A. $Q \times 2 + 6$ B. $Q \times 2$
 C. $Q + 6$ D. $Q \times 2 - 7$

10)

Input (Y)	3	5	8	4	2
Output	27	45	72	36	18

A. $Y \times 11 - 2$ B. $Y \times 9 - 4$
 C. $Y \times 14 + 2$ D. $Y \times 9$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Finding Rule w/ Two Steps

Name: **Answer Key**

Determine which rule best represents the expression the function machine used.

Input (M)	8	4	2	3	5
Output	31	11	1	6	16

- A. $M \times 5$ B. $M \times 8 - 9$
 C. $M \times 5 + 12$ D. $M \times 5 - 9$

Input (S)	5	8	2	3	4
Output	17	23	11	13	15

- A. $S \times 7$ B. $S \times 2 + 7$
 C. $S \times 2 + 6$ D. $S + 7$

Input (U)	11	9	10	12	15
Output	4	2	3	5	8

- A. $U \times 8$ B. $U + 8$
 C. $U \times 7 + 10$ D. $U - 7$

Input (P)	14	11	10	8	9
Output	8	5	4	2	3

- A. $P + 9$ B. $P - 6$
 C. $P \times 9 + 9$ D. $P \times 9$

Input (G)	4	2	5	3	8
Output	19	5	26	12	47

- A. $G \times 9$ B. $G \times 7 - 9$
 C. $G \times 7 + 11$ D. $G \times 7$

Input (R)	2	8	3	5	4
Output	10	16	11	13	12

- A. $R + 3$ B. $R + 8$
 C. $R \times 12 + 3$ D. $R \times 7 - 3$

Input (V)	8	2	4	3	5
Output	17	11	13	12	14

- A. $V \times 14 + 2$ B. $V \times 8 - 2$
 C. $V \times 2$ D. $V + 9$

Input (Z)	8	5	4	3	2
Output	24	15	12	9	6

- A. $Z + 4$ B. $Z \times 3 + 5$
 C. $Z \times 3$ D. $Z \times 6 - 4$

Input (Q)	5	3	4	8	2
Output	16	12	14	22	10

- A. $Q \times 2 + 6$ B. $Q \times 2$
 C. $Q + 6$ D. $Q \times 2 - 7$

Input (Y)	3	5	8	4	2
Output	27	45	72	36	18

- A. $Y \times 11 - 2$ B. $Y \times 9 - 4$
 C. $Y \times 14 + 2$ D. $Y \times 9$

Answers

1. **D**

2. **B**

3. **D**

4. **B**

5. **B**

6. **B**

7. **D**

8. **C**

9. **A**

10. **D**