



Name: _____

Date: _____

Algebra 1 – Unit 2 – Inputs and Outputs (Challenge)

1. Pattern: (2, 16), (7, 31). Find output for input 6
2. Rule: $3(x + 7) + 3$, Output: 33, Input: ?
3. Rule: $4(x + 7) + 10$, Output: 50, Input: ?
4. Rule: $4(x + 3) + 10$, Output: 42, Input: ?
5. Pattern: (3, 18), (8, 38). Find output for input 5
6. Rule: $6(x + 15)$, Input: 4, Output: ?
7. Rule: $3(x + 9)$, Input: 3, Output: ?
8. Pattern: (3, 18), (8, 43). Find output for input 10



Algebra 1 – Unit 2 – Inputs and Outputs (Challenge) – Answer Key

1. Pattern: (2, 16), (7, 31). Find output for input 6

$$x = 28$$

2. Rule: $3(x + 7) + 3$, Output: 33, Input: ?

$$x = 3$$

3. Rule: $4(x + 7) + 10$, Output: 50, Input: ?

$$x = 3$$

4. Rule: $4(x + 3) + 10$, Output: 42, Input: ?

$$x = 5$$

5. Pattern: (3, 18), (8, 38). Find output for input 5

$$x = 26$$

6. Rule: $6(x + 15)$, Input: 4, Output: ?

$$x = 114$$

7. Rule: $3(x + 9)$, Input: 3, Output: ?

$$x = 36$$

8. Pattern: (3, 18), (8, 43). Find output for input 10

$$x = 53$$