



Name: _____

Date: _____

Inputs and Outputs – Challenge

1. Rule: $3(x + 2) + 6$, Output: 24, Input: ? 2. Rule: $3(x + 10)$, Input: 6, Output: ?

3. Pattern: (2, 17), (7, 37). Find output for input 5 4. Pattern: (2, 18), (7, 43). Find output for input 8

5. Rule: $2(x + 4) + 9$, Output: 23, Input: ? 6. Rule: $3(x + 3) + 10$, Output: 34, Input: ?

7. Rule: $3(x + 3) + 10$, Output: 43, Input: ? 8. Rule: $5(x + 11)$, Input: 3, Output: ?



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Inputs and Outputs – Challenge

9. Rule: $3(x + 5) + 12$, Output: 45, Input: ? 10. Rule: $3(x + 11)$, Input: 4, Output: ?

11. Rule: $5(x + 6)$, Input: 2, Output: ? 12. Rule: $4(x + 3) + 10$, Input: ?

13. Rule: $6(x + 12)$, Input: 3, Output: ? 14. Rule: $2(x + 7) + 4$, Input: ?

15. Pattern: (1, 12), (7, 30). Find output for input 12 16. Rule: $3(x + 5) + 5$, Output: 41, Input: ?



Inputs and Outputs – Challenge – Answer Key

1. Rule: $3(x + 2) + 6$, Output: 24, Input: ? 2. Rule: $3(x + 10)$, Input: 6, Output: ?

x = 4

x = 48

3. Pattern: (2, 17), (7, 37). Find output for input 5 4. Pattern: (2, 18), (7, 43). Find output for input 8

x = 29

x = 48

5. Rule: $2(x + 4) + 9$, Output: 23, Input: ? 6. Rule: $3(x + 3) + 10$, Output: 34, Input: ?

x = 3

x = 5

7. Rule: $3(x + 3) + 10$, Output: 43, Input: ? 8. Rule: $5(x + 11)$, Input: 3, Output: ?

x = 8

x = 70



Inputs and Outputs – Challenge – Answer Key

9. Rule: $3(x + 5) + 12$, Output: 45, Input: ?

x = 6

10. Rule: $3(x + 11)$, Input: 4, Output: ?

x = 45

11. Rule: $5(x + 6)$, Input: 2, Output: ?

x = 40

12. Rule: $4(x + 3) + 10$, Output: 30, Input: ?

x = 2

13. Rule: $6(x + 12)$, Input: 3, Output: ?

x = 90

14. Rule: $2(x + 7) + 4$, Output: 32, Input: ?

x = 7

15. Pattern: (1, 12), (7, 30). Find output for input 12

x = 45

16. Rule: $3(x + 5) + 5$, Output: 41, Input: ?

x = 7