



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Introduction to Equations – Challenge

1. If  $x = 4$  makes  $3x + 4 = 6x + ?$  true,  
find ?
2.  $4x + 10 = 42$
3.  $4x + 18 = 74$
4. If  $x = 10$  makes  $4x + 7 = 3x + ?$  true,  
find ?
5. If  $x = 9$  makes  $2x + 4 = 4x + ?$  true,  
find ?
6. If  $x = 4$  makes  $5x + 5 = 3x + ?$  true,  
find ?
7. If  $x = 7$  makes  $4x + 5 = 4x + ?$  true,  
find ?
8.  $7x + 16 = 86$



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## Introduction to Equations – Challenge

9. If  $2x + 14 = 24$ , subtract what from both sides to get  $2x = 10$ ?       $10. 6x + 12 = 90$

11.  $5x + 9 = 59$

12. If  $x = 4$  makes  $4x + 6 = 4x + ?$  true, find ?

13. If  $2x + 9 = 29$ , subtract what from both sides to get  $2x = 20$ ?

14. If  $x = 11$  makes  $3x + 5 = 6x + ?$  true, find ?

15.  $3x + 17 = 29$

16.  $4x + 11 = 47$



# Introduction to Equations – Challenge – Answer Key

1. If  $x = 4$  makes  $3x + 4 = 6x + ?$  true,  
find ?

**x = -8**

2.  $4x + 10 = 42$

**x = 8**

3.  $4x + 18 = 74$

**x = 14**

4. If  $x = 10$  makes  $4x + 7 = 3x + ?$  true,  
find ?

**x = 17**

5. If  $x = 9$  makes  $2x + 4 = 4x + ?$  true,  
find ?

**x = -14**

6. If  $x = 4$  makes  $5x + 5 = 3x + ?$  true,  
find ?

**x = 13**

7. If  $x = 7$  makes  $4x + 5 = 4x + ?$  true,  
find ?

**x = 5**

8.  $7x + 16 = 86$

**x = 10**



## Introduction to Equations – Challenge – Answer Key

9. If  $2x + 14 = 24$ , subtract what from both sides to get  $2x = 10$ ?

$x = 14$

$$10. 6x + 12 = 90$$

$x = 13$

11.  $5x + 9 = 59$

$x = 10$

12. If  $x = 4$  makes  $4x + 6 = 4x + ?$  true, find ?

$x = 6$

13. If  $2x + 9 = 29$ , subtract what from both sides to get  $2x = 20$ ?

$x = 9$

14. If  $x = 11$  makes  $3x + 5 = 6x + ?$  true, find ?

$x = -28$

15.  $3x + 17 = 29$

$x = 4$

16.  $4x + 11 = 47$

$x = 9$