



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 ?

$$x = -28$$

$$15. 3x + 17 = 29$$

$$x = 4$$

$$16. 4x + 11 = 47$$

$$x = 9$$