



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

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

## Unit 2 – What Are Solutions?

For each equation, write the number of solutions (zero, one, or infinite).

1.  $7x + 15 = 7x + 24$

2. If  $5x + k = 5x + 4$  has infinite solutions, find  $k$

3.  $6x + 5 = 4x + 13$

4. If  $3x + 6 = 3x + k$  has no solution,  $k$  could be:

5.  $6x + 18 = 6x + 18$

6.  $2x + 11 = 2x + 11$

7.  $5x + 3 = 5x + 3$

8.  $4x + 15 = 4x + 23$



## Unit 2 – What Are Solutions? – Answer Key

1.  $7x + 15 = 7x + 24$   
zero

2. If  $5x + k = 5x + 4$  has infinite solutions, find k

4

3.  $6x + 5 = 4x + 13$   
one

4. If  $3x + 6 = 3x + k$  has no solution, k could be:

13

5.  $6x + 18 = 6x + 18$   
infinite

6.  $2x + 11 = 2x + 11$   
infinite

7.  $5x + 3 = 5x + 3$   
infinite

8.  $4x + 15 = 4x + 23$   
zero