Name: _____ Date: _____

Number Of Solutions To Equations - Medium

Determine whether each equation has no solution, one solution, or infinitely many solutions. Show your work by simplifying the equation.

1. $3x + 1 = 3x + 1$
2. $6x + 7 = 6x + 10$
3. $4x + 10 = 4x + 10$
4. $3x + 7 = 3x + 8$
5. $5x + 2 = 5x + 2$
6. $4x + 3 = 4x + 7$
7. $5x + 9 = 5x + 11$
8. $6x + 2 = 6x + 2$
9. $2x + 7 = 2x + 7$
10. $4x + 9 = 4x + 9$

Name: _____ Date: _____

Fresh Math

Number Of Solutions To Equations - Medium

Determine whether each equation has no solution, one solution, or infinitely many solutions. Show your work by simplifying the equation.

11. $5x + 9 = 5x + 9$

12. $2x + 2 = 2x + 2$

13. $4x + 1 = 4x + 1$

14. $6x + 7 = 6x + 7$

15. $2x + 6 = 2x + 6$

16. $4x + 8 = 4x + 8$

17. $6x + 5 = 6x + 8$

18. $2x + 5 = 2x + 5$

19. $2x + 6 = x + 7$

20. $5x + 2 = 5x + 4$

Number Of Solutions To Equations - Medium - Answer Key

1. $3x + 1 = 3x + 1$
   Infinitely many solutions

2. $6x + 7 = 6x + 10$
   No solution

3. $4x + 10 = 4x + 10$
   Infinitely many solutions

4. $3x + 7 = 3x + 8$
   No solution

5. $5x + 2 = 5x + 2$
   Infinitely many solutions

6. $4x + 3 = 4x + 7$
   No solution

7. $5x + 9 = 5x + 11$
   No solution

8. $6x + 2 = 6x + 2$
   Infinitely many solutions

9. $2x + 7 = 2x + 7$
   Infinitely many solutions

10. $4x + 9 = 4x + 9$
    Infinitely many solutions

Number Of Solutions To Equations - Medium - Answer Key

11. $5x + 9 = 5x + 9$
    Infinitely many solutions

12. $2x + 2 = 2x + 2$
    Infinitely many solutions

13. $4x + 1 = 4x + 1$
    Infinitely many solutions

14. $6x + 7 = 6x + 7$
    Infinitely many solutions

15. $2x + 6 = 2x + 6$
    Infinitely many solutions

16. $4x + 8 = 4x + 8$
    Infinitely many solutions

17. $6x + 5 = 6x + 8$
    No solution

18. $2x + 5 = 2x + 5$
    Infinitely many solutions

19. $2x + 6 = x + 7$
    One solution: $x = 1$

20. $5x + 2 = 5x + 4$
    No solution